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MPSRCH (TM)

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Release 3.1A John F. Collins, Biocomputing Research Unit.

MPsrch_pp protein - protein database search, using Smith-Waterman algorithm

Run on: Thu Dec 23 10:27:14 1999; MasPar time 3.30 Seconds
38.638 Million cell updates/sec

Tabular output not generated.

Title: >US-09-177-843-2
Description: (1-6) from US09177843.pep
Perfect Score: 41
Sequence: 1 GRGESP 6

Scoring table: PAM 150
Gap 15

Searched: 170751 seqs, 21266608 residues

Post-processing: Minimum Match 0%
Listing first 1000 summaries
Maximum DB seq length 6

Database: a-geneseq35
1:part1 2:part2 3:part3 4:part4 5:part5 6:part6 7:part7
8:part8 9:part9 10:part10 11:part11 12:part12 13:part13
14:part14 15:part15 16:part16 17:part17 18:part18
19:part19 20:part20 21:part21 22:part22 23:part23
24:part24 25:part25 26:part26 27:part27 28:part28
29:part29 30:part30 31:part31 32:part32 33:part33
34:part34 35:part35 36:part36 37:part37 38:part38
39:part39

Statistics: Mean 13.673; Variance 32.713; scale 0.418

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	% Query Match	Length	DB	ID	Description	Pred. No.
1	41	100.0	6	39	W86168	Peptide used in gel c	7.31e+01
2	41	100.0	6	36	W66843	Peptide useful for al	7.31e+01
3	41	100.0	6	19	W07429	Control peptide used	7.31e+01
4	41	100.0	6	14	R79079	Integrin binding cont	7.31e+01
5	41	100.0	6	18	R99890	Control synthetic pep	7.31e+01
6	41	100.0	6	1	R04613	Antiviral agent.	7.31e+01
7	41	100.0	6	13	R71457	Control hexapeptide t	7.31e+01
8	41	100.0	6	25	W11185	Control peptide.	7.31e+01
9	41	100.0	6	18	W03491	Alpha(5)-Beta(1) inte	7.31e+01
10	41	100.0	6	28	W34090	Peptide SEQ ID NO:2 f	7.31e+01
11	40	97.6	6	39	W86167	Peptide used in gel c	9.97e+01
12	40	97.6	6	35	W71248	Peptide sequence of t	9.97e+01
13	40	97.6	6	35	W79658	Cyclo(1,6)-Gly-Arg-Gl	9.97e+01
14	40	97.6	6	7	R37029	Peptide for isolating	9.97e+01
15	40	97.6	6	29	W45920	Control peptide #7.	9.97e+01
16	40	97.6	6	5	R27033	Peptide lipid contg.	9.97e+01
17	40	97.6	6	14	R79077	Alpha5/beta1 integrin	9.97e+01
18	40	97.6	6	21	W15598	Platelet aggregation	9.97e+01
19	40	97.6	6	31	W48597	Integrin receptor ant	9.97e+01
20	40	97.6	6	28	W45490	Targeting ligand dire	9.97e+01
21	40	97.6	6	19	W01130	RGD peptide 1 for gli	9.97e+01
22	40	97.6	6	5	R29061	Peptide contg. RGD mo	9.97e+01
23	40	97.6	6	24	W25182	RGD-peptide capable o	9.97e+01
24	40	97.6	6	16	R94570	RGD peptide.	9.97e+01
25	40	97.6	6	6	R32421	GRGDSP synthetic pept	9.97e+01
26	40	97.6	6	5	R29054	Peptide lipid contg.	9.97e+01
27	40	97.6	6	36	W66818	Peptide useful for al	9.97e+01
28	40	97.6	6	31	W51239	Alpha v beta 3 recept	9.97e+01
29	40	97.6	6	7	R36712	Adhesion formation pr	9.97e+01
30	40	97.6	6	8	R44046	RGD peptide derivativ	9.97e+01
31	40	97.6	6	4	R24241	Activation independen	9.97e+01
32	40	97.6	6	5	R29070	Gelatin deriv. peptid	9.97e+01
33	40	97.6	6	6	R29158	PEG-contg. peptide de	9.97e+01
34	40	97.6	6	6	R32387	Fibrinogen fragment w	9.97e+01
35	40	97.6	6	5	R26807	Propen-amido peptide	9.97e+01
36	40	97.6	6	37	W70545	CS-1 peptide fragment	9.97e+01
37	40	97.6	6	2	R24212	Fragment of tenascin-	9.97e+01
38	40	97.6	6	31	W57198	RGD-containing peptid	9.97e+01
39	40	97.6	6	5	R29056	Peptide contg. RGD mo	9.97e+01
40	40	97.6	6	30	W45883	Peptide membrane bind	9.97e+01
41	40	97.6	6	19	W07431	Synthetic, weak, tumo	9.97e+01
42	40	97.6	6	19	W03680	Fibronectin elution p	9.97e+01
43	40	97.6	6	28	W34089	Beta-1 integrin cell	9.97e+01
44	40	97.6	6	33	W65003	Synthetic osteoclast	9.97e+01
45	40	97.6	6	5	R29063	Peptide contg. RGD mo	9.97e+01
46	40	97.6	6	7	R35465	Propene-amide deriv.	9.97e+01
47	40	97.6	6	17	R92740	RGD-containing sequen	9.97e+01
48	40	97.6	6	7	R37834	Cell adhesion motif e	9.97e+01
49	40	97.6	6	9	R49801	Sequence of peptide w	9.97e+01
50	40	97.6	6	5	R25425	Peptide deriv. contg.	9.97e+01
51	40	97.6	6	27	W35452	Non-dendritic peptide	9.97e+01
52	40	97.6	6	15	R80966	RGD contg. peptide us	9.97e+01
53	40	97.6	6	7	R36708	Adhesion formation pr	9.97e+01
54	40	97.6	6	12	R70654	Synthetic RGD peptide	9.97e+01
55	40	97.6	6	7	R36710	Adhesion formation pr	9.97e+01
56	40	97.6	6	11	R57890	Binding site derived	9.97e+01
57	40	97.6	6	5	R26814	Polyethylene glycol d	9.97e+01
58	40	97.6	6	14	R70478	Cancer metastasis inh	9.97e+01
59	40	97.6	6	17	R88570	RGD-containing sequen	9.97e+01
60	40	97.6	6	1	R04612	Antiviral agent.	9.97e+01
61	40	97.6	6	24	W25186	RGD-peptide capable o	9.97e+01
62	40	97.6	6	2	R06455	Fibronectin derived R	9.97e+01
63	40	97.6	6	13	R71456	Competitor fibronecti	9.97e+01
64	40	97.6	6	4	R22969	Cell adhesive peptide	9.97e+01
65	40	97.6	6	18	W03484	Alpha(5)-Beta(1) inte	9.97e+01
66	40	97.6	6	18	R99889	RGD-contg. synthetic	9.97e+01
67	40	97.6	6	5	R29068	Peptide contg. RGD mo	9.97e+01
68	38	92.7	6	16	R94571	RGD peptide.	1.84e+02
69	38	92.7	6	39	W84459	RGD peptide that stim	1.84e+02
70	38	92.7	6	7	R36709	Adhesion formation pr	1.84e+02
71	38	92.7	6	1	R04871	Peptide from fibronec	1.84e+02
72	38	92.7	6	19	W07430	Synthetic, preferred	1.84e+02
73	38	92.7	6	8	R47384	PH-30 beta disintegri	1.84e+02
74	38	92.7	6	2	R11506	Cell attachment promo	1.84e+02
75	37	90.2	6	7	R36711	Adhesion formation pr	2.48e+02
76	37	90.2	6	19	W07432	Synthetic, weak, tumo	2.48e+02
77	37	90.2	6	24	W25181	RGD-peptide capable o	2.48e+02
78	33	80.5	5	27	W43308	Control peptide.	8.05e+02
79	33	80.5	5	1	R04611	Antiviral agent.	8.05e+02
80	33	80.5	5	8	R47385	PH-30 beta disintegri	8.05e+02
81	33	80.5	5	12	R70655	Synthetic RGD peptide	8.05e+02
82	33	80.5	5	5	R26813	Polyethylene glycol d	8.05e+02
83	33	80.5	5	14	R70474	Cancer metastasis inh	8.05e+02
84	33	80.5	6	5	R25319	Cell contact inhibito	8.05e+02
85	33	80.5	6	31	W48518	Integrin receptor ant	8.05e+02
86	33	80.5	6	5	R29075	Gelatin deriv. peptid	8.05e+02
87	33	80.5	6	37	W68568	Conformationally cons	8.05e+02
88	33	80.5	6	36	W66827	Peptide useful for al	8.05e+02

89	33	80.5	6	31	W48577	Integrin receptor ant	8.05e+02
90	33	80.5	6	16	R96371	RGD cyclic peptide, T	8.05e+02
91	33	80.5	6	14	R70475	Cancer metastasis inh	8.05e+02
92	32	78.0	5	7	R34451	Fibronectin-like bind	1.07e+03
93	32	78.0	5	7	R36714	Adhesion formation pr	1.07e+03
94	32	78.0	5	13	R62948	RGD contg. peptide is	1.07e+03
95	32	78.0	5	10	R55076	Fibronectin gelatin b	1.07e+03
96	32	78.0	5	8	R44045	RGD peptide derivativ	1.07e+03
97	32	78.0	5	5	R24516	Platelet antagonist p	1.07e+03
98	32	78.0	5	9	R48654	RGD containing peptid	1.07e+03
99	32	78.0	5	8	R37131	RGD peptide deriv. #2	1.07e+03
100	32	78.0	5	27	W43306	Epitope found on oste	1.07e+03
101	32	78.0	5	31	W51241	Peptide which inhibit	1.07e+03
102	32	78.0	5	5	R29051	Peptide lipid contg.	1.07e+03
103	32	78.0	5	33	W65001	Synthetic angiogenesi	1.07e+03
104	32	78.0	5	7	R35463	Propene-amide deriv.	1.07e+03
105	32	78.0	5	14	R70477	Cancer metastasis inh	1.07e+03
106	32	78.0	5	24	W25177	RGD-peptide capable o	1.07e+03
107	32	78.0	5	1	R07442	Peptide with anti-met	1.07e+03
108	32	78.0	5	5	R27030	Peptide lipid contg.	1.07e+03
109	32	78.0	5	1	R04610	Antiviral agent.	1.07e+03
110	32	78.0	6	9	R48653	RGD containing peptid	1.07e+03
111	32	78.0	6	18	R92858	Fibronectin fragment	1.07e+03
112	32	78.0	6	35	W79653	Cyclo(1-alpha, 6-gamm	1.07e+03
113	32	78.0	6	37	W68569	Conformationally cons	1.07e+03
114	32	78.0	6	8	R39600	Arg-Gly-Asp-contg. pe	1.07e+03
115	32	78.0	6	14	R70482	Cancer metastasis inh	1.07e+03
116	32	78.0	6	31	W56676	Peptide derived from	1.07e+03
117	31	75.6	6	36	W66829	Peptide useful for al	1.42e+03
118	31	75.6	6	16	R96377	RGD cyclic peptide, T	1.42e+03

Note: Post-processor removed 882 summaries from list due to search parameters chosen.

ALIGNMENTS

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RESULT    1
ID   W86168 standard; peptide; 6 AA.
AC   W86168;
DT   04-MAR-1999  (first entry)
DE   Peptide used in gel contracton assays.
KW   Wound contraction; reduction; inhibition; tissue regeneration; scar;
KW   wound; joint motion; body deformation; gel contraction.
OS   Synthetic.
PN   US5851994-A.
PD   22-DEC-1998.
PF   06-JUN-1995; 473025.
PR   06-JUN-1995; US-473025.
PR   28-APR-1994; US-234979.
PA   (LJOL-) LA JOLLA CANCER RES FOUND.
PI   Polarek J, Schreiber R;
DR   WPI; 99-080478/07.
PT   Inhibition of wound contraction - with peptide derivatives rich in
PT   basic amino acids
PS   Example 2; Column 13; 16pp; English.
CC   The invention provides methods for reduction or inhibition of wound
CC   contraction that comprises administration of a peptide having more than
CC   3 consecutive basic amino acid residues. Alternatively, the peptide
CC   contains the amino acid sequence Arg-Gly-Asp and a basic amino acid
CC   sequence, or the peptide comprises 6-30 amino acids in which at least
CC   4 out of a sequence of 6 consecutive amino acids are basic amino acids.
CC   The method is used to allow normal tissue regeneration without excessive
CC   scar formation which, in the case of large wounds, can result in loss of
CC   joint motion or major body deformation. This peptide is used in gel
CC   contraction assays along with the claimed peptides (W86170-83) to
CC   determine the activity of a peptide to reduce or inhibit gel contraction.
SQ   Sequence   6 AA;

  Query Match          100.0%;  Score 41;  DB 39;  Length 6;
  Best Local Similarity 100.0%;  Pred. No. 7.31e+01;
  Matches     6;  Conservative    0;  Mismatches   0;  Indels   0;  Gaps   0;

Db      1 grgesp 6
          ||||||
Qy      1 GRGESP 6


RESULT    2
ID   W66843 standard; peptide; 6 AA.
AC   W66843;
DT   10-DEC-1998  (first entry)
DE   Peptide useful for altering bone resorption.
KW   bone resorption; pharmacore; angiogenesis; restenosis; integrin receptor;
KW   alpha v beta 3 integrin receptor; osteoclast.
OS   Synthetic.
PN   US5807819-A.
PD   15-SEP-1998.
PF   12-APR-1995; 421698.
PR   12-APR-1995; US-421698.
PR   15-APR-1994; US-227316.
PR   08-SEP-1994; US-303052.
PA   (LJOL-) LA JOLLA CANCER RES CENT.
PI   Cheng S, Ingram R, Mullen D, Tschopp JF;
DR   WPI; 98-555601/47.
PT   Use of peptide derivatives which can alter integrin receptor binding
PT   - for altering bone resorption, treating angiogenesis or restenosis
PT   and altering integrin receptor mediated interactions
PS   Example 2; Figure 2A; 87pp; English.
CC   A new method is claimed for altering bone resorption. It comprises
CC   administration of a peptide of formula: X1X2X3X4GDX5X6X7X8; where X1 =
CC   R1R2N or 0-10 amino acids (optionally protected by acetylation at the N-
CC   terminus); X2 = absent or 1 amino acid; X3 = absent or 1 or 2 amino
CC   acids; X4 = N-Me-Arg; X5 = residue which provides an ionic interaction
CC   with an integrin receptor, or is Msa, Psa or Tfsa;  X6 = residue which
CC   has an aliphatic side chain; a non-natural amino acid that is
CC   hydrophobic; or Thr; X7 = a residue capable of forming a bond (i) with a
CC   bridging amino acid of X2, (ii) with X3 when X2 is absent, or (iii) with
CC   X4 when X2 and X3 are absent, to conformationally restrain the peptide;
CC   X8 = NR3R4; OR5; or 0-10 amino acids, optionally protected as an amide at
CC   the C- terminus; R1, R3-R5 = H or alkyl; R2 = H, alkyl, alkyl-CO or
CC   phenyl-CO. The peptides are useful for inhibiting bone resorption,
CC   angiogenesis or restenosis, and for altering integrin receptor-mediated
CC   interactions, especially alpha v beta 3 integrin receptor-mediated
CC   binding of cells to a matrix. They may be used for reducing or inhibiting
CC   osteoclast binding to a matrix. The present sequence represents an
CC   example of a peptide disclosed in the specification.
SQ   Sequence   6 AA;

  Query Match          100.0%;  Score 41;  DB 36;  Length 6;
  Best Local Similarity 100.0%;  Pred. No. 7.31e+01;
  Matches     6;  Conservative    0;  Mismatches   0;  Indels   0;  Gaps   0;

Db      1 grgesp 6
          ||||||
Qy      1 GRGESP 6


RESULT    3
ID   W07429 standard; peptide; 6 AA.
AC   W07429;
DT   21-JAN-1997  (first entry)
DE   Control peptide used in tumour invasion-inhibition assay.
KW   Tumour invasion; extracellular matrix; ECM; metastasis; RGD sequence;
KW   cancer; inhibition; control.
OS   Synthetic.
PN   US5547936-A.
PD   20-AUG-1996.
PF   22-NOV-1983; 554821.
PR   22-NOV-1983; US-554821.
PR   17-JUN-1985; US-744981.
PR   10-MAR-1988; US-166530.
PR   09-SEP-1988; US-242713.
PR   25-FEB-1991; US-660526.
PR   10-APR-1991; US-683585.
PR   08-OCT-1991; US-773106.
PR   19-JUN-1992; US-902742.
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PR 17-DEC-1993; US-169743.
PA (LJOL-) LA JOLLA CANCER RES FOUND.
PI Gehlsen KR, Pierschbacher MD, Ruoslahti EI;
DR WPI; 96-392651/39.
PT Inhibiting tumour cell invasion through an extracellular matrix -
PT using peptide contg. the RGD sequence, partic. for preventing tumour
PT metastasis
PS Example 3; Column 7-8; 8pp; English.
CC W07429 is a control peptide used in an assay for testing peptides
CC for tumour-invasion inhibitory activity. The peptides suspected of
CC having this ability contained the RGD sequence (Arg-Gly-Asp). The
CC control did not and was not expected to show any inhibitory action.
CC Other peptides tested (see W07430-W06433) did show inhibitory
CC activity, these peptides can be used to treat cancer and to prevent
CC metastasis, in partic. invasion of the extracellular matrix (ECM).
CC The peptides are also soluble.
SQ Sequence 6 AA;

Query Match 100.0%; Score 41; DB 19; Length 6;
Best Local Similarity 100.0%; Pred. No. 7.31e+01;
Matches 6; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Db 1 grgesp 6
||||||
Qy 1 GRGESP 6

RESULT 4
ID R79079 standard; peptide; 6 AA.
AC R79079;
DT 24-JAN-1996 (first entry)
DE Integrin binding control peptide.
KW High affinity; integrin binding peptide; alpha5/beta1; alphav/beta5;
KW alphav/beta3; RGD; stable configuration; wound healing;
KW osteoclast attachemnt; bone; angiogenesis; metastasis; tumour;
KW smooth muscle cell migration.
OS Synthetic.
PN WO9514714-A1.
PD 01-JUN-1995.
PF 22-NOV-1994; U13542.
PR 24-NOV-1993; US-158001.
PR 04-AUG-1994; US-286861.
PA (LJOL-) LA JOLLA CANCER RES FOUND.
PI Koivunen E, Ruoslahti E;
DR WPI; 95-206899/27.
PT High affinity integrin binding peptides - can be used to attach
PT cells to a substrate, inhibit the attachment of osteoclasts to bone,
PT promote wound healing, inhibit angiogenesis, metastasis of tumours
PT and migration of smooth muscle cells
PS Example 6; Page 29; 86pp; English.
CC The sequences given in R76185-200 and R79073-94 are high affinity
CC integrin binding peptides which bind to various integrins. Peptides
CC which bind to alpha5/beta1 integrins contain the motifs given in
CC R76185-86 and peptides which bind to alphav/beta5 and alphav/beta3
CC integrins contain the motif given in R76187. Alphav/beta5 integrins
CC are also bound by RGD containing peptides. These peptides assume a
CC conformationally stabilised configuration which is due to the
CC formation of a disulphide bond, a peptide bond or a lactam bond.
CC These peptides may be used for isolating the complementary integrin
CC from a sample mixture by contacting them under ionic conditions to
CC allow binding of the integrin to the peptide and then separating the
CC integrin from the peptide. They can be used for attaching cells to
CC a substrate, by binding them to the substrate with the cell. The
CC peptides promote wound healing when applied locally and inhibit the
CC attachment of osteoclasts to bone. They inhibit angiogenesis,
CC metastasis of tumours and migration of smooth muscle cells. This
CC peptide had no effect on integrin binding and was used as a control.
SQ Sequence 6 AA;

Query Match 100.0%; Score 41; DB 14; Length 6;
Best Local Similarity 100.0%; Pred. No. 7.31e+01;
Matches 6; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Db 1 grgesp 6
||||||
Qy 1 GRGESP 6

RESULT 5
ID R99890 standard; peptide; 6 AA.
AC R99890;
DT 05-NOV-1996 (first entry)
DE Control synthetic peptide ligand.
KW fibrinogen; blood clotting; GPIIb-IIIa receptor; binding; complex;
KW epitope; exposed; monoclonal antibody.
OS Synthetic.
PN US5470738-A.
PD 28-NOV-1995.
PF 08-JUL-1987; 070953.
PR 08-JUL-1987; US-070953.
PR 31-MAR-1988; US-175342.
PR 05-OCT-1989; US-417565.
PR 04-OCT-1993; US-131320.
PA (SCRI) SCRIPPS RES INST.
PI Frelinger AL, Ginsberg MH, Plow EF;
DR WPI; 96-019874/02.
PT Monoclonal antibodies specific for ligand-bound GPIIb-IIIa receptor
PT - useful for detection of clotting disorders and thrombi
PS Example 5; Column 25; 20pp; English.
CC Monoclonal antibodies specific for a ligand-induced binding site on
CC GPIIIa, esp. one induced in a platelet-associated GPIIb-IIIa/fibrinogen
CC complex are claimed. The MAb binds an epitope exposed upon binding of
CC the ligand and receptor. The epitope is not present on non-bound ligand
CC or receptor. The MAbs are useful to prevent blood clotting and in
CC diagnostics. The present sequence is a synthetic peptide ligand used to
CC show the specificity of the antibody-bindng only in association with
CC RGD-contg. ligands.
SQ Sequence 6 AA;

Query Match 100.0%; Score 41; DB 18; Length 6;
Best Local Similarity 100.0%; Pred. No. 7.31e+01;
Matches 6; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Db 1 grgesp 6
||||||
Qy 1 GRGESP 6

RESULT 6
ID R04613 standard; protein; 6 AA.
AC R04613;
DT 05-SEP-1990 (first entry)
DE Antiviral agent.
KW Antiviral; M2; poliovirus; polio; heatitis.
OS Synthetic.
PN J02078631-A.
PD 19-MAR-1990.
PF 14-SEP-1988; 228843.
PR 14-SEP-1988; JP-228843.
PA (NIHA) Nippon Mining KK.
DR WPI; 90-129060/17.
PT Antiviral agent contg. tri:peptide (unit) -
PT of basic aminoacid, then alanine, glycine or sarcosine, and
PT acidic aminoacid, effective against virus with protein-terminated DNA
PT or RNA.
PS Disclosure; 4pp; Japanese.
CC Peptide is effective against inhibiting propogation of DNA or RNA
CC bonded, protein containing viruses eg. Poliovirus, Hepatitis virus.
SQ Sequence 6 AA;

Query Match 100.0%; Score 41; DB 1; Length 6;
Best Local Similarity 100.0%; Pred. No. 7.31e+01;
Matches 6; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Db 1 grgesp 6
||||||

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Qy      1 GRGESP 6


RESULT    7
ID   R71457 standard; peptide; 6 AA.
AC   R71457;
DT   20-OCT-1995  (first entry)
DE   Control hexapeptide to measure transmembrane force transfer.
KW   fibronectin; cytoskeleton; transmembrane force transfer; diagnostic;
KW   characterise cell; mechanical stimulation; ferromagnetic bead.
OS   Synthetic.
PN   WO9506248-A.
PD   02-MAR-1995.
PF   25-AUG-1994; U09685.
PR   25-AUG-1993; US-112757.
PA   (CHIL-) CHILDRENS MEDICAL CENT.
PA   (HARD ) HARVARD COLLEGE.
PI   Butler JP,  Fredberg JJ,  Ingber DE,  Wang N;
DR   WPI; 95-106940/14.
PT   System for applying mechanical loads to specific cell surface
PT   molecules  - using ferromagnetic beads coated with attachment
PT   molecules, and alignment and twisting magnetic fields, e.g. for
PT   screening therapeutic agents, toxins etc.
PS   Example 1; Page 19; 42pp; English.
CC   The system of the invention is used to determine the effect of
CC   mechanical stimulation of mols. present on a cell surface.
CC   Ferromagnetic microbeads are coated with attachment mols. eg. matrix
CC   mols., etc. that physically interconnect with distinct cytoskeletal
CC   proteins. A strong external magnetic field is applied to the beads, to
CC   impose a defined mechanical stress. Transmembrane force transfer is
CC   measured and the cells observed for changes in stiffening and twisting.
CC   To demonstrate the specificity of transmembrane force transfer in
CC   living endothelial cells, a soluble synthetic peptide (R71456) was
CC   included in the culture medium as a competitior. The fibronectin
CC   peptide inhibited cytoskeletal stiffening whereas this control
CC   hexapeptide with a single amino acid substitution had no
CC   inhibitory effects.
SQ   Sequence   6 AA;

  Query Match          100.0%;  Score 41;  DB 13;  Length 6;
  Best Local Similarity 100.0%;  Pred. No. 7.31e+01;
  Matches     6;  Conservative    0;  Mismatches   0;  Indels   0;  Gaps   0;

Db      1 grgesp 6
          ||||||
Qy      1 GRGESP 6


RESULT    8
ID   W11185 standard; Peptide; 6 AA.
AC   W11185;
DT   15-JAN-1998  (first entry)
DE   Control peptide.
KW   Breast tumour homing peptide; cancer; in vivo panning; screening;
KW   phage display; drug delivery.
OS   Synthetic.
PN   WO9710507-A1.
PD   20-MAR-1997.
PF   10-SEP-1996; U14600.
PR   11-SEP-1995; US-526710.
PR   11-SEP-1995; US-526708.
PA   (LJOL-) LA JOLLA CANCER RES FOUND.
PI   Pasqualini R,  Ruoslahti E;
DR   WPI; 97-202359/18.
PT   Obtaining compound that homes to selected organ or tissue - by in
PT   vivo panning method, specifically to identify brain, kidney,
PT   angiogenic vasculature or tumour tissue homing peptide(s)
PS   Example 3; Page 64; 75pp; English.
CC   Coinjection of this synthetic inactive control peptide with phage
CC   expressing an RGD-containing breast tumour-homing peptide had no
CC   effect on the amount of phage expressing the tumour homing peptide
CC   in the tumour.  Tumour homing peptides (see W13412-52) have been
CC   selected using a novel in vivo panning method and are useful for
CC   delivering e.g. toxins, drugs and labels to selected organs or
CC   tissues.
SQ   Sequence   6 AA;

  Query Match          100.0%;  Score 41;  DB 25;  Length 6;
  Best Local Similarity 100.0%;  Pred. No. 7.31e+01;
  Matches     6;  Conservative    0;  Mismatches   0;  Indels   0;  Gaps   0;

Db      1 grgesp 6
          ||||||
Qy      1 GRGESP 6


RESULT    9
ID   W03491 standard; peptide; 6 AA.
AC   W03491;
DT   24-OCT-1996  (first entry)
DE   Alpha(5)-Beta(1) integrin binding peptide 9.
KW   Synthetic; fibronectin; vitronectin; integrin; binding motif; adhesion;
KW   extracellular matrix protein; tumour metastasis.
OS   Synthetic.
PN   US5536814-A.
PD   16-JUL-1996.
PF   27-SEP-1993; 127422.
PR   27-SEP-1993; US-127422.
PR   11-MAR-1994; US-212186.
PA   (LJOL-) LA JOLLA CANCER RES FOUND.
PI   Koivunen E,  Ruoslahti E;
DR   WPI; 96-341556/34.
PT   Synthetic integrin-binding peptide(s) - useful for inhibiting tumour
PT   metastasis, etc.
PS   Disclosure; Fig 4A; 16pp; English.
CC   Peptides W03483-508 are examples of synthetic peptides generated to bind
CC   to the fibronectin/vitronectin-binding integrin alpha(5)beta(1).  They
CC   are synthesised to contain the alpha(5)beta(1)-integrin peptide binding
CC   motifs: DGR, NGR or RGD.  The peptides interfere with the binding of
CC   fibronectin and vitronectin to this integrin and thus may be used to
CC   block integrin-mediated cell adhesion to extracellular matrix proteins,
CC   esp. to inhibit tumour metastasis.
SQ   Sequence   6 AA;

  Query Match          100.0%;  Score 41;  DB 18;  Length 6;
  Best Local Similarity 100.0%;  Pred. No. 7.31e+01;
  Matches     6;  Conservative    0;  Mismatches   0;  Indels   0;  Gaps   0;

Db      1 grgesp 6
          ||||||
Qy      1 GRGESP 6


RESULT   10
ID   W34090 standard; peptide; 6 AA.
AC   W34090;
DT   05-MAY-1998  (first entry)
DE   Peptide SEQ ID NO:2 from WO9739773 Example 1.
KW   Beta-1 cell surface receptor; beta-1 integrin-binding domain;
KW   cancer; tenascin; inflammation; receptor stimulator; fibrin;
KW   inhibitor; leucocyte migration.
OS   Unidentified.
PN   WO9739773-A1.
PD   30-OCT-1997.
PF   22-APR-1997; U06577.
PR   22-APR-1996; US-635572.
PA   (UYCO ) UNIV COLUMBIA NEW YORK.
PI   Loike J, Silverstein SC;
DR   WPI; 97-535582/49.
PT   Treating infection caused by in-dwelling devices - also similar
PT   methods for treating cancers coated with tenascin and treating
PT   inflammation with receptor stimulators
PS   Example 1; Page 27; 91pp; English.
CC   A novel method has been developed for treating infection caused by
CC   bacteria on the surface of an in-dwelling foreign body, over and
CC   around which fibrin has been deposited. The method comprises
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CC   administration of an agent that inhibits signalling mediated by a
CC   beta 1-integrin cell surface receptor on leucocytes. The agent enhances
CC   migration of leucocytes in and through the fibrin so that they can
CC   reach and kill the bacteria. The present sequence represents a
CC   peptide which is mentioned but not used in the present invention.
CC   Treatment with the agent overcomes the inhibitory effects of
CC   fibrin or tenascin on leucocyte migration.
SQ   Sequence   6 AA;

  Query Match          100.0%;  Score 41;  DB 28;  Length 6;
  Best Local Similarity 100.0%;  Pred. No. 7.31e+01;
  Matches     6;  Conservative    0;  Mismatches   0;  Indels   0;  Gaps   0;

Db      1 grgesp 6
          ||||||
Qy      1 GRGESP 6


RESULT   11
ID   W86167 standard; peptide; 6 AA.
AC   W86167;
DT   04-MAR-1999  (first entry)
DE   Peptide used in gel contracton assays.
KW   Wound contraction; reduction; inhibition; tissue regeneration; scar;
KW   wound; joint motion; body deformation; gel contraction.
OS   Synthetic.
PN   US5851994-A.
PD   22-DEC-1998.
PF   06-JUN-1995; 473025.
PR   06-JUN-1995; US-473025.
PR   28-APR-1994; US-234979.
PA   (LJOL-) LA JOLLA CANCER RES FOUND.
PI   Polarek J, Schreiber R;
DR   WPI; 99-080478/07.
PT   Inhibition of wound contraction - with peptide derivatives rich in
PT   basic amino acids
PS   Example 2; Column 13; 16pp; English.
CC   The invention provides methods for reduction or inhibition of wound
CC   contraction that comprises administration of a peptide having more than
CC   3 consecutive basic amino acid residues. Alternatively, the peptide
CC   contains the amino acid sequence Arg-Gly-Asp and a basic amino acid
CC   sequence, or the peptide comprises 6-30 amino acids in which at least
CC   4 out of a sequence of 6 consecutive amino acids are basic amino acids.
CC   The method is used to allow normal tissue regeneration without excessive
CC   scar formation which, in the case of large wounds, can result in loss of
CC   joint motion or major body deformation. This peptide is used in gel
CC   contraction assays along with the claimed peptides (W86170-83) to
CC   determine the activity of a peptide to reduce or inhibit gel contraction.
SQ   Sequence   6 AA;

  Query Match           97.6%;  Score 40;  DB 39;  Length 6;
  Best Local Similarity  83.3%;  Pred. No. 9.97e+01;
  Matches     5;  Conservative    1;  Mismatches   0;  Indels   0;  Gaps   0;

Db      1 grgdsp 6
          |||:||
Qy      1 GRGESP 6


RESULT   12
ID   W71248 standard; Peptide; 6 AA.
AC   W71248;
DT   18-NOV-1998  (first entry)
DE   Peptide sequence of the invention.
KW   Hepatitis drug; integrin inhibitor; integrin binding; VLA-4; treatment;
KW   hepatitis.
OS   Synthetic.
PN   WO9837914-A1.
PD   03-SEP-1998.
PF   26-FEB-1998; J00802.
PR   26-FEB-1997; JP-042493.
PA   (TORA ) TORAY IND INC.
PI   Kainoh M, Moriya K, Tanaka T;
DR   WPI; 98-480938/41.
PT   Integrin inhibitors including antibodies, proteins, nucleic acids,
PT   saccharide(s), capable of binding to integrin(s) as active
PT   ingredient in remedies - for treating hepatitis, by inhibiting cell
PT   adhesion
PS   Example 4; Page 19; 35pp; Japanese.
CC   The present sequence is used in the course of the invention. The
CC   specification describes Hepatitis drugs which contain integrin
CC   inhibitors as the active ingredient. These integrin inhibitors include
CC   antibodies, proteins, polypeptides, peptides, nucleic acids, saccharides,
CC   and their derivatives. They also include low molecular weight compounds
CC   capable of binding to integrins (e.g. alpha chain type with alpha 1,
CC   alpha 2, etc., or beta chain type with beta 1, beta 2, etc.),
CC   particularly anti-VLA-4 antibody, VLA-4 inhibiting peptides and low
CC   molecular weight VLA-4 inhibiting compounds. The products can be used
CC   for treating hepatitis.
SQ   Sequence   6 AA;

  Query Match           97.6%;  Score 40;  DB 35;  Length 6;
  Best Local Similarity  83.3%;  Pred. No. 9.97e+01;
  Matches     5;  Conservative    1;  Mismatches   0;  Indels   0;  Gaps   0;

Db      1 grgdsp 6
          |||:||
Qy      1 GRGESP 6


RESULT   13
ID   W79658 standard; peptide; 6 AA.
AC   W79658;
DT   08-DEC-1998  (first entry)
DE   Cyclo(1,6)-Gly-Arg-Gly-Asp-Ser-Pro.
KW   Platelet aggregation inhibitor; antithrombotic; antimetastatic; cyclic.
OS   Synthetic.
FH   Key             Location/Qualifiers
FT   Modified_site    1..6
FT                    /note= "the alpha-amino group of Gly(1) is condensed
FT                     with the carboxy of Pro(6) to give a cyclic molecule"
PN   US5643872-A.
PD   01-JUL-1997.
PF   26-AUG-1994; 296621.
PR   19-DEC-1990; US-630124.
PR   23-OCT-1989; US-425906.
PR   28-SEP-1990; US-590635.
PR   26-AUG-1994; US-296621.
PA   (SMIK ) SMITHKLINE BEECHAM CORP.
PI   Ali FE, Samanen JM;
DR   WPI; 97-350267/32.
PT   New peptide derivatives - are useful in inhibiting platelet
PT   aggregation and clot formation, and for inhibiting reocclusion of
PT   blood vessels following fibrinolytic therapy.
PS   Disclosure; Column 7; 28pp; English.
CC   The patent describes new cyclic peptides which have a core of formula
CC   -B-Gly-Asp-, where B = a D- or L-amino acid chosen from Arg, HArg
CC   (i.e. homoarginine), (Me2)Arg, (Et2)Arg and Lys (or an alpha-substituted
CC   derivative of these). Cyclisation is effected through specific types of
CC   covalent linkages. The cyclic peptides are platelet aggregation and clot
CC   formation inhibitors. They may be used in treatment of acute myocardial
CC   infarction, deep vein thrombosis, pulmonary embolism, dissecting
CC   aneurysm, transient ischaemic attack, stroke, unstable angina,
CC   disseminated intravascular coagulation, septicaemia, surgical or
CC   infectious shock, post-operative and post-partum trauma, cardiopulmonary
CC   bypass surgery, incompatible blood transfusion, abruptio placenta,
CC   thrombotic thrombocytopaenic purpura, snake venom and immune diseases.
CC   They may also be used for inhibiting reocclusion of blood vessels
CC   following fibrinolytic therapy. They may also be used in prevention of
CC   metastatic conditions.
CC   The present sequence is a specific example of the new peptides.
SQ   Sequence   6 AA;

  Query Match           97.6%;  Score 40;  DB 35;  Length 6;
  Best Local Similarity  83.3%;  Pred. No. 9.97e+01;
  Matches     5;  Conservative    1;  Mismatches   0;  Indels   0;  Gaps   0;
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Db      1 grgdsp 6
          |||:||
Qy      1 GRGESP 6


RESULT   14
ID   R37029 standard; peptide; 6 AA.
AC   R37029;
DT   18-AUG-1993  (first entry)
DE   Peptide for isolating cell surface receptors.
KW   Affinity chromatography; matrix-linked; vitronectin receptor.
OS   Synthetic.
PN   US5206347-A.
PD   27-APR-1993.
PF   06-AUG-1985; 763046.
PR   06-AUG-1985; US-763046.
PR   09-SEP-1988; US-242712.
PR   13-JUL-1990; US-553355.
PA   (LJOL-) LA JOLLA CANCER RES FOUND.
PI   Pierschbacher MD,  Ruoslahti EI;
DR   WPI; 93-151781/18.
PT   Cell surface receptors isolation from cell extracts - by affinity
PT   chromatography using matrix linked peptide contg. arginine
PT   glycine aspartic acid sequence, for serum spreading factor
PS   Disclosure; Page 8; 8pp; English.
CC   The peptide contains the sequence Arg-Gly-Asp, which is also present
CC   in the binding site of fibronectin.  The peptide is coupled to a
CC   matrix and used in an affinity chromatography column.  The column
CC   may be used to bind the vitronectin, fibronectin, fibrinogen and von
CC   Willebrand's factor receptors from osteosarcoma or other mesenchymal
CC   cells and platelets.  The receptors may be incorporated into
CC   liposomes for drug delivery or used as prostheses where attachment
CC   of extracellular matrix is required.
SQ   Sequence   6 AA;

  Query Match           97.6%;  Score 40;  DB 7;  Length 6;
  Best Local Similarity  83.3%;  Pred. No. 9.97e+01;
  Matches     5;  Conservative    1;  Mismatches   0;  Indels   0;  Gaps   0;

Db      1 grgdsp 6
          |||:||
Qy      1 GRGESP 6


RESULT   15
ID   W45920 standard; peptide; 6 AA.
AC   W45920;
DT   29-JUN-1998  (first entry)
DE   Control peptide #7.
KW   Anti-thrombotic agent; cardiovascular disease; disulphide bond; stroke;
KW   aggegation; clot; platelet; myocardial infarction; thrombosis.
OS   Synthetic.
PN   WO9725343-A2.
PD   17-JUL-1997.
PF   10-JAN-1997; U00385.
PR   11-JAN-1996; US-585281.
PA   (LJOL-) LA JOLLA CANCER RES FOUND.
PI   Mullen DG, Pierschbacher MD;
DR   WPI; 97-372812/34.
PT   New cyclic peptide(s) - used for treatment of thrombosis and
PT   thrombotic conditions, e.g. stroke and myocardial infarction
PS   Example 2; Page 31; 43pp; English.
CC   This sequence represents a control peptide. The invention relates to
CC   cyclic peptides which can be used for the treatment of thrombosis or a
CC   thrombotic condition selected from stroke, myocardial infarction,
CC   vascular graft occlusion, unstable angina and abrupt reclosure following
CC   angioplasty. They decrease aggregation at a clot site but do not affect
CC   normal platelet function and do not inhibit platelet aggregation
CC   throughout the whole blood stream. They therefore reduce bleeding
CC   complications typical of other thrombotic agents.
SQ   Sequence   6 AA;

  Query Match           97.6%;  Score 40;  DB 29;  Length 6;
  Best Local Similarity  83.3%;  Pred. No. 9.97e+01;
  Matches     5;  Conservative    1;  Mismatches   0;  Indels   0;  Gaps   0;

Db      1 grgdsp 6
          |||:||
Qy      1 GRGESP 6


RESULT   16
ID   R27033 standard; peptide; 6 AA.
AC   R27033;
DT   17-FEB-1993  (first entry)
DE   Peptide lipid contg. RGD.
KW   Synthetic; cell migration; inhibitor; cell adhesion membrane; cell
KW   culture body.
OS   Synthetic.
FH   Key             Location/Qualifiers
FT   modified_site   1
FT                   /note= "acylated"
FT   modified_site   6
FT                   /note= "alkylated"
PN   J04221395-A.
PD   11-AUG-1992.
PF   29-NOV-1990; 333336.
PR   26-OCT-1990; JP-289494.
PA   (FUJF ) FUJI PHOTO FILM CO LTD.
DR   WPI; 92-313679/38.
PT   New synthetic peptide lipid(s) and salts - useful as cell
PT   migration inhibitors, cell adhesion membranes or cell culture
PT   bodies
PS   Disclosure; Page 4; 9pp; Japanese.
CC   The peptide sequence is an example of a highly generic sequence contg.
CC   the RGD motif.  Compounds contg. these lipid peptides are useful as
CC   cell migration inhibitors in cell adhesion membranes or cell culture
CC   bodies.   See also R27027-32.
SQ   Sequence   6 AA;

  Query Match           97.6%;  Score 40;  DB 5;  Length 6;
  Best Local Similarity  83.3%;  Pred. No. 9.97e+01;
  Matches     5;  Conservative    1;  Mismatches   0;  Indels   0;  Gaps   0;

Db      1 grgdsp 6
          |||:||
Qy      1 GRGESP 6


RESULT   17
ID   R79077 standard; peptide; 6 AA.
AC   R79077;
DT   24-JAN-1996  (first entry)
DE   Alpha5/beta1 integrin binding peptide #10.
KW   High affinity; integrin binding peptide; alpha5/beta1; alphav/beta5;
KW   alphav/beta3; RGD; stable configuration; wound healing;
KW   osteoclast attachemnt; bone; angiogenesis; metastasis; tumour;
KW   smooth muscle cell migration.
OS   Synthetic.
PN   WO9514714-A1.
PD   01-JUN-1995.
PF   22-NOV-1994; U13542.
PR   24-NOV-1993; US-158001.
PR   04-AUG-1994; US-286861.
PA   (LJOL-) LA JOLLA CANCER RES FOUND.
PI   Koivunen E,  Ruoslahti E;
DR   WPI; 95-206899/27.
PT   High affinity integrin binding peptides - can be used to attach
PT   cells to a substrate, inhibit the attachment of osteoclasts to bone,
PT   promote wound healing, inhibit angiogenesis, metastasis of tumours
PT   and migration of smooth muscle cells
PS   Example 13; Page 39; 86pp; English.
CC   The sequences given in R76185-200 and R79073-94 are high affinity
CC   integrin binding peptides which bind to various integrins.  Peptides
CC   which bind to alpha5/beta1 integrins contain the motifs given in
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CC   R76185-86 and peptides which bind to alphav/beta5 and alphav/beta3
CC   integrins contain the motif given in R76187.  Alphav/beta5 integrins
CC   are also bound by RGD containing peptides.  These peptides assume a
CC   conformationally stabilised configuration which is due to the
CC   formation of a disulphide bond, a peptide bond or a lactam bond.
CC   These peptides may be used for isolating the complementary integrin
CC   from a sample mixture by contacting them under ionic conditions to
CC   allow binding of the integrin to the peptide and then separating the
CC   integrin from the peptide.  They can be used for attaching cells to
CC   a substrate, by binding them to the substrate with the cell.  The
CC   peptides promote wound healing when applied locally and inhibit the
CC   attachment of osteoclasts to bone.  They inhibit angiogenesis,
CC   metastasis of tumours and migration of smooth muscle cells.
SQ   Sequence   6 AA;

  Query Match           97.6%;  Score 40;  DB 14;  Length 6;
  Best Local Similarity  83.3%;  Pred. No. 9.97e+01;
  Matches     5;  Conservative    1;  Mismatches   0;  Indels   0;  Gaps   0;

Db      1 grgdsp 6
          |||:||
Qy      1 GRGESP 6


RESULT   18
ID   W15598 standard; peptide; 6 AA.
AC   W15598;
DT   11-JUN-1997  (first entry)
DE   Platelet aggregation inhibitor #22.
KW   Platelet aggregation inhibitor; RGD analogue; cyclic peptide; fibrinogen;
KW   hydrophobically enhanced analogue; blood platelet; endothelial surface;
KW   blood vessel; serum protein; GP IIb/IIIa glycoprotein complex; integrin;
KW   plasma membrane; thrombosis; cell adhesion receptor; fibronectin;
KW   vitronectin receptor; vascular graft occlusion; therapy.
OS   Synthetic.
FH   Key             Location/Qualifiers
FT   modified_site   1..6
FT                   /note= "forms peptide bond to create cyclic peptide"
PN   US5612311-A.
PD   18-MAR-1997.
PF   06-APR-1990; 506444.
PR   06-APR-1990; US-506444.
PR   05-APR-1991; US-681119.
PR   14-APR-1993; US-050736.
PR   02-MAR-1994; US-204817.
PR   22-DEC-1994; US-363963.
PA   (LJOL-) LA JOLLA CANCER RES FOUND.
PI   Cheng S,  Craig WS,  Lukeman DS,  Pierschbacher MD;
PI   Tschopp JF;
DR   WPI; 97-192139/17.
PT   RGD-contg. peptide(s) that inhibit platelet aggregation - useful for
PT   treating thrombosis
PS   Example 5; Column 39; 50pp; English.
CC   W15576-W15695 represent platelet aggregation inhibitors. All of these
CC   sequences are hydrophobically enhanced RGD peptide analogues. The
CC   interaction of blood platelets with the endothelial surface of injured
CC   blood vessels and with other platelets (platelet aggregation) is a major
CC   factor in the course of development of thrombi. Thrombosis is a serious
CC   condition which can cause tissue damage and eventually death (if
CC   untreated). Platelet aggregation is dependent upon the binding of
CC   fibrinogen and other serum proteins to the GP IIb/IIIa glycoprotein
CC   complex on the platelet plasma membrane. GP IIb/IIIa is a member of the
CC   integrin family of cell adhesion receptors, which are known to recognise
CC   a RGD tripeptide recognition sequence. The peptides inhibit platelet
CC   aggregation without prolonging bleeding time.  These sequences have high
CC   affinity for the IIb/IIIa receptor and low affinity for the fibronectin
CC   and vitronectin receptors. The peptides are used as platelet aggregation
CC   inhibitors for treating thrombosis and vascular graft occlusion.
SQ   Sequence   6 AA;

  Query Match           97.6%;  Score 40;  DB 21;  Length 6;
  Best Local Similarity  83.3%;  Pred. No. 9.97e+01;
  Matches     5;  Conservative    1;  Mismatches   0;  Indels   0;  Gaps   0;

Db      1 grgdsp 6
          |||:||
Qy      1 GRGESP 6


RESULT   19
ID   W48597 standard; peptide; 6 AA.
AC   W48597;
DT   18-AUG-1998  (first entry)
DE   Integrin receptor antagonist peptide 136.
KW   Integrin receptor antagonist; cell adhesion modulator; leukocyte;
KW   extracellular matrix; fibronectin; ARDS; thrombosis; inflammation.
OS   Synthetic.
FH   Key             Location/Qualifiers
FT   Modified_site   1..6
FT                   /note= "Gly is conjugated to Pro"
FT   Modified_site   1..2
FT                   /note= "Gly is linked to Arg by a pseudo-CH2.NH
FT                          linkage"
PN   US5721210-A.
PD   24-FEB-1998.
PF   07-JUN-1995; 485019.
PR   04-JUN-1993; US-961889.
PR   09-JUL-1990; US-550330.
PR   09-JUL-1991; WO-U04862.
PR   07-JUN-1995; US-485019.
PA   (TANA ) TANABE SEIYAKU CO.
PI   Cardarelli PM, Chiang S, Lobl TJ;
DR   WPI; 98-168442/15.
PT   New cyclic peptide(s) and peptidomimetic compounds - are integrin
PT   receptor antagonists useful in modulating cell adhesion.
PS   Disclosure; Column 38; 32pp; English.
CC   The present sequence represents a synthetic peptide which
CC   acts as an antagonist to integrin receptors.  Some of the residues
CC   are in reverse orientation which means that the normal carboxyl to
CC   amino direction of peptide bond formation in the amino acid backbone
CC   has been reversed such that the amino portion of the peptide bond
CC   precedes the carbonyl portion.  The invention provides various synthetic
CC   peptides which act as cell adhesion modulators because they mimic
CC   extra-cellular matrix ligands or other cell adhesion ligands that bind
CC   to receptors such as integrin receptors, including fibronectin,
CC   laminin, LFA-1, MAC-1, p150,95, vitronectin and gpIIb/IIIa receptors.
CC   Some of the peptides contain the amino acid sequence Arg-Gly-Asp (RGD).
CC   Others contain non-RGD sequences, for e.g RCD sequences, and reverse
CC   orientation forms of amino acid residues.  The synthetic peptides
CC   are useful in modulating cell adhesion, including adhesion related to
CC   fibronectin, as well as leukocyte adhesion to endothelial cells.  They
CC   are also claimed to be useful in the study, diagnosis, treatment or
CC   prevention of diseases which relate to cell adhesion, e.g. adult
CC   respiratory distress syndrome (ARDS), thrombosis and inflammatory
CC   conditions.
SQ   Sequence   6 AA;

  Query Match           97.6%;  Score 40;  DB 31;  Length 6;
  Best Local Similarity  83.3%;  Pred. No. 9.97e+01;
  Matches     5;  Conservative    1;  Mismatches   0;  Indels   0;  Gaps   0;

Db      1 grgdsp 6
          |||:||
Qy      1 GRGESP 6


RESULT   20
ID   W45490 standard; peptide; 6 AA.
AC   W45490;
DT   20-MAY-1998  (first entry)
DE   Targeting ligand directed to the glycoprotein GPIIb/IIIa receptor.
KW   Contrast agent; targeted composition; diagnosis; diseased tissue;
KW   glycoprotein GPIIb/IIIa receptor.
OS   Synthetic.
OS   Homo sapiens.
PN   WO9640285-A1.
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PD 19-DEC-1996.
PF 06-JUN-1996; U09938.
PR 01-MAY-1996; US-640464.
PR 07-JUN-1995; US-497684.
PA (IMAR-) IMARX PHARM CORP.
PI Shen D, Unger EC, Wu G;
DR WPI; 97-077233/07.
PT Contrast agent or targeted compsn. for imaging or treating diseased
PT tissue - comprising lipid, protein or polymer, a gas, and a
PT targeting ligand e.g. a protein, peptide, saccharide or steroid
PS Disclosure; Page 55; 175pp; English.
CC This sequence represents a targeting ligand directed to the GPIIbIIIa
CC receptor. The invention relates to a contrast agent for diagnostic
CC imaging or a target composition which comprises: (i) a lipid, protein or
CC polymer and (ii) a gas, in combination with (iii) a targeting ligand
CC (T1). T1 targets cells or receptors selected from myocardial,
CC endothelial, epithelial and tumour cells and the glycoprotein GPIIb/IIIa
CC receptor. Also claimed are: a composition comprising vesicles containing
CC (i) - (iii) and an aqueous carrier; a targeted vesicle composition
CC comprising a fluorinated gas and a targeting ligand (T1') which targets
CC tissues or receptors; a formulation for therapeutic or diagnostic use
CC comprising (i)-(iii) and a bioactive agent; and a method for providing an
CC image of an internal region of a patient, or for diagnosing the presence
CC of diseased tissue, comprising: (a) administration of a composition as
CC above; and (b) scanning the patient using ultrasound to obtain a visible
CC image of the region or diseased tissue. The methods and compounds are
CC useful for imaging or diagnosing the presence of diseased tissue,
CC especially myocardial, endothelial or epithelial tissue but also
CC gastrointestinal and cardiovascular regions. In particular the ligand
CC targets regions of arteriosclerosis. Stabilised vesicles are
CC particularly useful for perfusion imaging. The vesicles may also be used
CC to deliver active agents to an intended target such as tissue or a
CC receptor, and ultrasound can then be used to promote rupture of the
CC vesicles and release a bioactive or diagnostic agent.
SQ Sequence 6 AA;

Query Match 97.6%; Score 40; DB 28; Length 6;
Best Local Similarity 83.3%; Pred. No. 9.97e+01;
Matches 5; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

Db 1 grgdsp 6
||||:||
Qy 1 GRGESP 6

RESULT 21
ID W01130 standard; peptide; 6 AA.
AC W01130;
DT 18-DEC-1996 (first entry)
DE RGD peptide 1 for glia cell removal.
KW glia cell; neuron; analysis; behaviour; selective; removal.
OS Synthetic.
FH Key Location/Qualifiers
FT modified_site 6
FT /note= "Pro-NH2"
PN J08073495-A.
PD 19-MAR-1996.
PF 31-AUG-1994; 232263.
PR 31-AUG-1994; JP-232263.
PA (AGEN) AGENCY OF IND SCI & TECHNOLOGY.
DR WPI; 96-205531/21.
PT Selective remover for glia cells from neuronal cell cultures -
PT useful for studying behaviour of neurons in the absence of glia
PT cells.
PS Claim 1; Page 2; 6pp; Japanese.
CC W01130-34 are RGD peptides which selectively remove glia cells in the
CC presence of neurons. This enables analysis of behaviour of neurons in
CC the absence of glia cells.
SQ Sequence 6 AA;

Query Match 97.6%; Score 40; DB 19; Length 6;
Best Local Similarity 83.3%; Pred. No. 9.97e+01;
Matches 5; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

Db 1 grgdsp 6
||||:||
Qy 1 GRGESP 6

RESULT 22
ID R29061 standard; peptide; 6 AA.
AC R29061;
DT 17-FEB-1993 (first entry)
DE Peptide contg. RGD motif as a side chain to a water sol. polymer.
KW Adhesive peptide; cell adhesion; inhibitor; platelet aggregation.
OS Synthetic.
FH Key Location/Qualifiers
FT modified_site 1
FT /note= "alkylated/arylated"
FT modified_site 6
FT /note= "alkylated/arylated"
PN J04221397-A.
PD 11-AUG-1992.
PF 20-DEC-1990; 404484.
PR 20-DEC-1990; JP-404484.
PA (FUJF) FUJI PHOTO FILM CO LTD.
DR WPI; 92-313681/38.
PT Water-soluble vinyl polymer deriv.- for animal cell adhesion
PT inhibitor or platelet aggregation inhibitor
PS Example; Page 13; 14pp; Japanese.
CC The peptide sequence cotains the Arg-Gly-Asp motif of cell
CC adhering proteins. It comprises the essential unit of a
CC water-sol. vinyl polymer with a pref. mol. wt. of 3000-100,000 D.
CC The polymer shows various biological actvities, e.g. immunological
CC coordination, wound healing action and platelet aggregation inhibiting
CC action etc. See also R29055-60.
SQ Sequence 6 AA;

Query Match 97.6%; Score 40; DB 5; Length 6;
Best Local Similarity 83.3%; Pred. No. 9.97e+01;
Matches 5; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

Db 1 grgdsp 6
||||:||
Qy 1 GRGESP 6

RESULT 23
ID W25182 standard; peptide; 6 AA.
AC W25182;
DT 05-JAN-1998 (first entry)
DE RGD-peptide capable of binding cell adhesion molecules.
KW RGD; arginine; glycine; aspartic acid; cell adhesion molecule;
KW binding; bladder irrigation; tumour removal; endoscopic operation;
KW transurethral resection; cancer; neoplasia.
OS Synthetic.
FH Key Location/Qualifiers
FT Modified_site 1
FT /label= MeGly
PN DE19529909-A1.
PD 20-FEB-1997.
PF 15-AUG-1995; 029909.
PR 15-AUG-1995; DE-029909.
PA (FREP) FRESENIUS AG.
PI Boehle A;
DR WPI; 97-133793/13.
PT Endoscopic irrigation solns. - contg. peptide(s) that bind to cell
PT adhesion molecules
PS Claim 5; Page 8; 8pp; German.
CC W25173-W25186 are peptides containing an RGD sequence or equivalent.
CC The peptides are capable of binding to cell adhesion molecules and
CC are used in aqueous irrigation solutions for use during and after
CC endoscopic operations. Preferred irrigation solutions are
CC electrolyte-free and contain 1 microg/ml to 100 mg/ml of one or more
CC oligopeptides containing the amino acid sequences: RGD, LDV, IDA, DGEA,
CC GPRP, VTL, YIGSR, KQAGDV and/or REDV (given in one letter amino acid

CC code). The solutions are especially used for irrigating the bladder
CC during and after tumour removal by transurethral resection. The
CC peptides protect against recurrence of tumours.
SQ Sequence 6 AA;

Query Match 97.6%; Score 40; DB 24; Length 6;
Best Local Similarity 83.3%; Pred. No. 9.97e+01;
Matches 5; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

Db 1 grgdsp 6
||| :||
Qy 1 GRGESP 6

RESULT 24
ID R94570 standard; Peptide; 6 AA.
AC R94570;
DT 21-JUN-1996 (first entry)
DE RGD peptide.
KW Cytotactin; neuron; neurite; cell attachment; cell elongation;
KW antibody.
OS Synthetic.
PN WO9608513-A1.
PD 21-MAR-1996.
PF 14-SEP-1995; U11684.
PR 16-SEP-1994; US-308359.
PA (SCRI) SCRIPPS RES INST.
PI Crossin KL, Phillips G, Prieto AL;
DR WPI; 96-179904/18.
PT Cytotactin polypeptide(s), derivs. and antibodies - capable of
PT stimulating neuronal cell attachment, neurite out-growth and cell
PT elongation
PS Example 5; Page 81; 159pp; English.
CC RGD peptides (R94570 and R94571), inhibitors of cell attachment to
CC type I collagen, inhibited attachment of chicken fibroblasts to
CC cytotactin (see also R94547-48) by 73% and 70% respectively.
CC Inhibition was total when the peptides were used together with JG22,
CC a function-blocking monoclonal antibody against the beta-1 integrin.
CC This suggests that there are 2 integrin binding sites on cytotactin.
SQ Sequence 6 AA;

Query Match 97.6%; Score 40; DB 16; Length 6;
Best Local Similarity 83.3%; Pred. No. 9.97e+01;
Matches 5; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

Db 1 grgdsp 6
||| :||
Qy 1 GRGESP 6

RESULT 25
ID R32421 standard; peptide; 6 AA.
AC R32421;
DT 07-JUN-1993 (first entry)
DE GRGDSP synthetic peptide.
KW Laminin receptor binding.
OS Synthetic.
PN US5180809-A.
PD 19-JAN-1993.
PF 25-MAY-1989; 357354.
PR 20-MAY-1988; US-196986.
PR 25-MAY-1989; US-357354.
PA (LJOL-) LA JOLLA CANCER RES FOUND.
PI Engvall E, Gehlsen KR, Ruoslahti EI;
DR WPI; 93-052874/06.
PT New mammalian laminin adhesion receptor - used in analyses,
PT prepn. of antibodies and screening, partic. for study and treatment
PT of tumour cells
PS Example; Page 11; 15pp; English.
CC This is the synthetic peptide GRGDSP which was used in the isolation
CC of a laminin adhesion receptor. The peptide does not inhibit the
CC binding of laminin receptor liposomes to laminin.
SQ Sequence 6 AA;

Query Match 97.6%; Score 40; DB 6; Length 6;
Best Local Similarity 83.3%; Pred. No. 9.97e+01;
Matches 5; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

Db 1 grgdsp 6
||| :||
Qy 1 GRGESP 6

RESULT 26
ID R29054 standard; peptide; 6 AA.
AC R29054;
DT 17-FEB-1993 (first entry)
DE Peptide lipid contg. RGD.
KW Synthetic; cell migration; inhibitor; cell adhesion membane; cell
KW culture body.
OS Synthetic.
FH Key Location/Qualifiers
FT modified_site 1
FT /note= "acylated"
FT modified_site 6
FT /note= "alkylated"
PN J04221394-A.
PD 11-AUG-1992.
PF 29-NOV-1990; 333335.
PR 26-OCT-1990; JP-289493.
PA (FUJF) FUJI PHOTO FILM CO LTD.
DR WPI; 92-313678/38.
PT New synthetic peptide lipid(s) and salts - useful as cell
PT migration inhibitors, cell adhesion membranes or cell culture
PT bodies
PS Disclcsure; Page 4; 9pp; Japanese.
CC The peptide sequence is an example of a highly generic sequence contg.
CC the RGD motif. Compounds contg. these lipid peptides are useful as
CC cell migration inhibitors in cell adhesion membranes or cell culture
CC bodies. See also R29048-53.
SQ Sequence 6 AA;

Query Match 97.6%; Score 40; DB 5; Length 6;
Best Local Similarity 83.3%; Pred. No. 9.97e+01;
Matches 5; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

Db 1 grgdsp 6
||| :||
Qy 1 GRGESP 6

RESULT 27
ID W66818 standard; peptide; 6 AA.
AC W66818;
DT 10-DEC-1998 (first entry)
DE Peptide useful for altering bone resorption.
KW bone resorption; pharmacore; angiogenesis; restenosis; integrin receptor;
KW alpha v beta 3 integrin receptor; osteoclast.
OS Synthetic.
PN US5807819-A.
PD 15-SEP-1998.
PF 12-APR-1995; 421698.
PR 12-APR-1995; US-421698.
PR 15-APR-1994; US-227316.
PR 08-SEP-1994; US-303052.
PA (LJOL-) LA JOLLA CANCER RES CENT.
PI Cheng S, Ingram R, Mullen D, Tschopp JF;
DR WPI; 98-555601/47.
PT Use of peptide derivatives which can alter integrin receptor binding
PT - for altering bone resorption, treating angiogenesis or restenosis
PT and altering integrin receptor mediated interactions
PS Example 2; Figure 2A; 87pp; English.
CC A new method is claimed for altering bone resorption. It comprises
CC administration of a peptide of formula: X1X2X3X4GDX5X6X7X8; where X1 =
CC R1R2N or 0-10 amino acids (optionally protected by acetylation at the N-
CC terminus); X2 = absent or 1 amino acid; X3 = absent or 1 or 2 amino

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CC   acids; X4 = N-Me-Arg; X5 = residue which provides an ionic interaction
CC   with an integrin receptor, or is Msa, Psa or Tfsa;  X6 = residue which
CC   has an aliphatic side chain; a non-natural amino acid that is
CC   hydrophobic; or Thr; X7 = a residue capable of forming a bond (i) with a
CC   bridging amino acid of X2, (ii) with X3 when X2 is absent, or (iii) with
CC   X4 when X2 and X3 are absent, to conformationally restrain the peptide;
CC   X8 = NR3R4; OR5; or 0-10 amino acids, optionally protected as an amide at
CC   the C- terminus; R1, R3-R5 = H or alkyl; R2 = H, alkyl, alkyl-CO or
CC   phenyl-CO. The peptides are useful for inhibiting bone resorption,
CC   angiogenesis or restenosis, and for altering integrin receptor-mediated
CC   interactions, especially alpha v beta 3 integrin receptor-mediated
CC   binding of cells to a matrix. They may be used for reducing or inhibiting
CC   osteoclast binding to a matrix. The present sequence represents an
CC   example of a peptide disclosed in the specification.
SQ   Sequence   6 AA;

  Query Match           97.6%;  Score 40;  DB 36;  Length 6;
  Best Local Similarity  83.3%;  Pred. No. 9.97e+01;
  Matches    5;  Conservative    1;  Mismatches   0;  Indels   0;  Gaps   0;

Db      1 grgdsp 6
          |||:||
Qy      1 GRGESP 6


RESULT   28
ID   W51239 standard; peptide; 6 AA.
AC   W51239;
DT   12-AUG-1998  (first entry)
DE   Alpha v beta 3 receptor inhibitor.
KW   Integrin alpha v beta 3 receptor; osteoporosis; restenosis; cancer;
KW   arthritis; diabetic; retinopathy; disulphide; inhibitor.
OS   Synthetic.
PN   US5767071-A.
PD   16-JUN-1998.
PF   07-JUN-1995; 482106.
PR   07-JUN-1995; US-482106.
PA   (IXSY-) IXSYS INC.
PI   Huse WD, Lee BA, Palladino MA, Varner JA;
DR   WPI; 98-361749/31.
PT   New Non-RGD cyclic peptides that bind to integrin receptor - useful
PT   for treating e.g. osteoporosis, restenosis, cancer, arthritis and
PT   diabetic retinopathy
PS   Disclosure; Column 2; 23pp; English.
CC   The invention relates to cyclic, non Arg-Gly-Asp (non-RGD) peptides that
CC   bind to the alpha v beta 3 integrin receptor and have the sequence Arg
CC   Cys X1 Gly Asp Ser X2 Cys X3, where the cysteines are connected by a di-
CC   sulphide bond, X1 is Gly, Ser or Ala, and X2 and X3 are any amino acids.
CC   The peptides are useful for treating diseases involving alpha v beta 3
CC   receptors e.g. osteoporosis, restenosis, cancer, arthritis and diabetic
CC   retinopathy. The present sequence represents an Arg-Gly-Asp containing
CC   peptide.
SQ   Sequence   6 AA;

  Query Match           97.6%;  Score 40;  DB 31;  Length 6;
  Best Local Similarity  83.3%;  Pred. No. 9.97e+01;
  Matches    5;  Conservative    1;  Mismatches   0;  Indels   0;  Gaps   0;

Db      1 grgdsp 6
          |||:||
Qy      1 GRGESP 6


RESULT   29
ID   R36712 standard; peptide; 6 AA.
AC   R36712;
DT   26-AUG-1993  (first entry)
DE   Adhesion formation prevention RGD-contg. peptide.
KW   Tissue repair; peritoneum; surgery; post-surgically; inhibition;
KW   platelet aggregation; cardiovascular; orthopedic; thoracic;
KW   ophthalmic; CNS; use.
OS   Synthetic.
FH   Key             Location/Qualifiers
FT   modified_site   1
FT                   /note= "n-methyl-Gly"
PN   WO9308818-A.
PD   13-MAY-1993.
PF   06-NOV-1992; U09494.
PR   07-NOV-1991; US-789231.
PA   (UYSC-) UNIV SOUTHERN CALIFORNIA.
PI   Dizerega GS, Rodgers KE;
DR   WPI; 93-167381/20.
PT   Prevention of adhesion formation, partic. post-surgically - comprises
PT   administering a RGD-contg. peptide for a time sufficient to permit
PT   tissue repair
PS   Example; Page 18; 22pp; English.
CC   The sequence is that of an RGD-contg. peptide which is used in a
CC   method for prevention of adhesion formation for a time sufficient
CC   to permit tissue repair. The method is used for minimising or
CC   preventing adhesion formation, partic. in the peritoneum following
CC   surgery, but also for e.g. cardiovascular, orthopedic, thoracic,
CC   ophthalmic, CNS and other uses. In addn., the peptide inhibits
CC   platelet aggregation and does not induce inflammation or trauma
CC   at the site of administration.
SQ   Sequence   6 AA;

  Query Match           97.6%;  Score 40;  DB 7;  Length 6;
  Best Local Similarity  83.3%;  Pred. No. 9.97e+01;
  Matches    5;  Conservative    1;  Mismatches   0;  Indels   0;  Gaps   0;

Db      1 grgdsp 6
          |||:||
Qy      1 GRGESP 6


RESULT   30
ID   R44046 standard; peptide; 6 AA.
AC   R44046;
DT   02-JUN-1994  (first entry)
DE   RGD peptide derivative #4.
KW   Drug; organ transplantation; rejection; immune disorder;
KW   systemic lupus.
OS   Synthetic.
FH   Key             Location/Qualifiers
FT   modified_site   1
FT                   /note= "C13H27CO-Gly"
FT   modified_site   4
FT                   /note= "Pro-OH"
PN   J05255105-A.
PD   05-OCT-1993.
PF   16-MAR-1992; 058460.
PR   16-MAR-1992; JP-058460.
PA   (FUJF ) FUJI PHOTO FILM CO LTD.
DR   WPI; 93-348360/44.
PT   Immuno-control drug for organ transplant rejection etc. - contains
PT   peptide having arginine, glycine, aspartic acid sequence
PS   Disclosure; Page 3; 11pp; Japanese.
CC   The sequences given in R44043-47 and R53144 represent examples of the
CC   claimed RGD containing peptide of the invention. These peptides all
CC   correspond to the generic formulae:
CC   HO2-(CH2)m-C(O)-([X]-Arg-Gly-Asp-[Y])n-O-CH2CH(OH)CH2OR  or
CC   R3-([X]-Arg-Gly-Asp-[Y])n-Z
CC   [X], [Y] = amino acid or peptide residues;
CC   m = 1-5;
CC   n = 1-5;
CC   R1, R2 = H or 8-24C acyk or alkyl;
CC   R3 = 6-24C acyl;
CC   Z = hydroxyl or amino.
CC   These peptides form the active part of drugs which are useful for the
CC   control of organ transplantation rejection or immune disorders such
CC   as systemic lupus.
SQ   Sequence   6 AA;

  Query Match           97.6%;  Score 40;  DB 8;  Length 6;
  Best Local Similarity  83.3%;  Pred. No. 9.97e+01;
  Matches    5;  Conservative    1;  Mismatches   0;  Indels   0;  Gaps   0;
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Db      1 grgdsp 6
          |||:||
Qy      1 GRGESP 6


RESULT   31
ID   R24241 standard; Protein; 6 AA.
AC   R24241;
DT   01-DEC-1992  (first entry)
DE   Activation independent ligand.
KW   Platelet aggregation disorder; ligand binding; occupancy; competent.
OS   Synthetic.
PN   WO9208982-A.
PD   29-MAY-1992.
PF   15-NOV-1991; U08579.
PR   15-NOV-1990; US-614723.
PA   (SCRI ) SCRIPPS RES INST.
PI   Ginsberg MH;
DR   WPI; 92-200317/24.
PT   Rapid characterisation of platelet aggregation disorders - by
PT   detecting levels of activation and ligand-occupancy competent
PT   platelets, pref. by flow cytometry after reaction with labelled
PT   antibodies
PS   Claim 9; Page 70; 76pp; English.
CC   The peptide is an activation independent ligand which is used as
CC   part of a method for characterising a platelet aggregation defect in
CC   a patient where the defect is an activation, ligand binding, or post
CC   occupancy defect. It forms a ligand-induced binding site on normal
CC   platelets which can be used to indicate the presence of ligand
CC   occupancy competent platelets in a sample. The method provides rapid
CC   characterisation of defects (less than 30 min. using platelet-rich
CC   plasma or whole blood), gives improved definition of the defects and
CC   requires only 0.5 ml of sample, conventional aggregation methods
CC   require about 20-30 ml. See also R24239-R24242.
SQ   Sequence   6 AA;

  Query Match           97.6%;  Score 40;  DB 4;  Length 6;
  Best Local Similarity  83.3%;  Pred. No. 9.97e+01;
  Matches     5;  Conservative    1;  Mismatches   0;  Indels   0;  Gaps   0;

Db      1 grgdsp 6
          |||:||
Qy      1 GRGESP 6


RESULT   32
ID   R29070 standard; peptide; 6 AA.
AC   R29070;
DT   17-FEB-1993  (first entry)
DE   Gelatin deriv. peptide contg. RGD motif.
KW   Adhesive peptide; cell adhesion; inhibitor; platelet aggregation.
OS   Synthetic.
FH   Key             Location/Qualifiers
FT   modified_site   1
FT                   /note= "alkylated/arylated"
FT   modified_site   6
FT                   /note= "alkylated/arylated"
PN   J04221400-A.
PD   11-AUG-1992.
PF   30-NOV-1990; 333719.
PR   26-OCT-1990; JP-289492.
PA   (FUJF ) FUJI PHOTO FILM CO LTD.
DR   WPI; 92-313683/38.
PT   Gelatin deriv. with adhesive peptide side chain - used for animal
PT   cell adhesion inhibitor and platelet aggregation-adhesion inhibitor
PS   Example; Page 12; 10pp; Japanese.
CC   The gelatin deriv. contains the Arg-Gly-Asp motif of cell adhering
CC   proteins.  It comprises the essential unit of a water-sol. vinyl
CC   polymer with a pref. mol. wt. of 3000-100,000 D. The polymer shows
CC   various biological actvities, e.g. immunological coordination, wound
CC   healing action and  platelet aggregation inhibiting action etc.
CC   See also R29069-75.
SQ   Sequence   6 AA;

  Query Match           97.6%;  Score 40;  DB 5;  Length 6;
  Best Local Similarity  83.3%;  Pred. No. 9.97e+01;
  Matches     5;  Conservative    1;  Mismatches   0;  Indels   0;  Gaps   0;

Db      1 grgdsp 6
          |||:||
Qy      1 GRGESP 6


RESULT   33
ID   R29158 standard; peptide; 6 AA.
AC   R29158;
DT   15-APR-1993  (first entry)
DE   PEG-contg. peptide deriv #1 comprising RGD-motif.
KW   Cell adhesion; Polyethylene glycol; fibronectin.
OS   Synthetic.
FH   Key             Location/Qualifiers
FT   modified_site   1
FT                   /note= "acylated by ROCCH2(OCH2CH2)nOCH2CO-
FT                   where R = GRGDSP and n = 1-150"
FT   modified_site   6
FT                   /note= "opt. amidated and if so, R is also
FT                   amidated"
PN   J04305597-A.
PD   28-OCT-1992.
PF   02-APR-1991; 068669.
PR   02-APR-1991; JP-068669.
PA   (FUJF ) FUJI PHOTO FILM CO LTD.
DR   WPI; 92-410149/50.
PT   New peptide-contg. polyethylene glycol derivs. - used to inhibit
PT   cancer metastasis or platelet aggregation and as lymphocyte
PT   activators
PS   Example 1; Page 3; 6pp; Japanese.
CC   The polyethylene glycol-contg. peptide derivs. contain the
CC   Arg-Gly-Asp (RGD) motif found in fibronectin. The derivs can be used
CC   as platelet aggregation inhibitors, lymphocyte activators and cancer
CC   metastasis inhibitors. See also R29159 and R33149.
SQ   Sequence   6 AA;

  Query Match           97.6%;  Score 40;  DB 6;  Length 6;
  Best Local Similarity  83.3%;  Pred. No. 9.97e+01;
  Matches     5;  Conservative    1;  Mismatches   0;  Indels   0;  Gaps   0;

Db      1 grgdsp 6
          |||:||
Qy      1 GRGESP 6


RESULT   34
ID   R32387 standard; peptide; 6 AA.
AC   R32387;
DT   01-JUL-1993  (first entry)
DE   Fibrinogen fragment which binds to receptor.
KW   integrin; glycoprotein GpIIb/IIIa; platelet aggregation;
KW   protein scrambling; Fb.
OS   Synthetic.
PN   WO9304079-A.
PD   04-MAR-1993.
PF   20-AUG-1992; U06933.
PR   21-AUG-1991; US-813315.
PA   (RECE-) RECEPTOR LAB INC.
PI   Hopfinger AJ,  Le Breton G,  Venton DL;
DR   WPI; 93-093932/11.
PT   Identifying peptide(s) which bond to predetermined targets - by
PT   random degradation and recombination of peptide(s) and isolating
PT   bound peptide(s)
PS   Example 4; Page 65; 89pp; English.
CC   The major cell surface integrin of platelets, GpIIb/IIIa, binds
CC   fibrinogen. The hexapeptide motif GRGDSP in fibrinogen represents
CC   the binding site.
SQ   Sequence   6 AA;
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  Query Match           97.6%;  Score 40;  DB 6;  Length 6;
  Best Local Similarity  83.3%;  Pred. No. 9.97e+01;
  Matches    5;  Conservative    1;  Mismatches   0;  Indels   0;  Gaps   0;

Db      1 grgdsp 6
          |||:||
Qy      1 GRGESP 6


RESULT   35
ID   R26807 standard; peptide; 6 AA.
AC   R26807;
DT   12-FEB-1993  (first entry)
DE   Propen-amido peptide copolymer.
KW   Tumour metastasis inhibitor; platelet aggregation; animal cell;
KW   adhesion; wound healing; cell culture media.
OS   Synthetic.
FH   Key             Location/Qualifiers
FT   modified_site   1
FT                   /note= "CH2=CCH3-CO-Gly"
PN   J04213311-A.
PD   04-AUG-1992.
PF   29-MAR-1991; 066159.
PR   27-NOV-1990; JP-324610.
PA   (FUJF ) FUJI PHOTO FILM CO LTD.
DR   WPI; 92-305482/37.
PT   New copolymers of propen-amido peptide(s) - are tumour
PT   metastasis, platelet aggregation and animal cell adhesion
PT   inhibitors also useful as wound healing agents and cell culture
PT   media
PS   Example; Page 6; 14pp; Japanese.
CC   The sequence is that of a propen-amido peptide copolymer, it and its
CC   salts are water soluble and is useful as a tumour metastasis
CC   inhibitor, a platelet aggregation inhibitor, an animal cell adhesion
CC   inhibitor, a wound healing agent and cell culture media.
CC   See also R26805-R26808.
SQ   Sequence   6 AA;

  Query Match           97.6%;  Score 40;  DB 5;  Length 6;
  Best Local Similarity  83.3%;  Pred. No. 9.97e+01;
  Matches    5;  Conservative    1;  Mismatches   0;  Indels   0;  Gaps   0;

Db      1 grgdsp 6
          |||:||
Qy      1 GRGESP 6


RESULT   36
ID   W70545 standard; peptide; 6 AA.
AC   W70545;
DT   26-JAN-1999  (first entry)
DE   CS-1 peptide fragment 3 (a fibronectin fragment).
KW   Integrin; alpha-4 chain; immunoglobulin; chimeric; heterodimer complex;
KW   inhibitor; binding; ligand; blood platelet; hemostatic; diagnostic agent;
KW   CS-1; fibronectin.
OS   Synthetic.
PN   WO9832771-A1.
PD   30-JUL-1998.
PF   29-JAN-1998; J00370.
PR   29-AUG-1997; JP-234544.
PR   29-JAN-1997; JP-015118.
PA   (TORA ) TORAY IND INC.
PI   Kainoh M, Tanaka T;
DR   WPI; 98-427881/36.
PT   Integrin-immunoglobulin chimeric protein heterodimer complexes as
PT   platelet substitutes - contain the alpha and beta integrin chains
PT   associated in stable state and bind to extracellular matrix in the
PT   presence of plasma components
PS   Example 10; Page 30; 87pp; Japanese.
CC   Sequences W70543 to W70545 represent CS-1 peptide fragments used during
CC   the course of the invention. The invention provides integrin-
CC   immunoglobulin chimeric protein heterodimer complexes that comprise an
CC   integrin alpha or beta chain associated with an immunoglobulin light or
CC   heavy chain. These chimeric proteins form heterodimer complexes, in
CC   particular with a chimeric protein containing an integrin alpha chain and
CC   an immunoglobulin chain with a chimeric protein containing an integrin
CC   beta chain and an immunoglobulin chain; the immunoglobulin chain in each
CC   case may be a heavy chain, or one of the two may be a light chain. The
CC   integrin alpha chain is preferably alpha 4 or alpha 2 and the integrin
CC   beta chain is preferably beta 1. Animal cells transformed with vectors
CC   containing the DNA coding for the above chimeric proteins can be used in
CC   the preparation of the chimeric proteins and their heterodimer complexes.
CC   The heterodimer complexes, which are useful for testing potential
CC   promoters and inhibitors of the binding of integrins to their ligands,
CC   function as blood platelet substitutes and hemostatics and as diagnostic
CC   agents.
SQ   Sequence   6 AA;

  Query Match           97.6%;  Score 40;  DB 37;  Length 6;
  Best Local Similarity  83.3%;  Pred. No. 9.97e+01;
  Matches    5;  Conservative    1;  Mismatches   0;  Indels   0;  Gaps   0;

Db      1 grgdsp 6
          |||:||
Qy      1 GRGESP 6


RESULT   37
ID   R24212 standard; Protein; 6 AA.
AC   R24212;
DT   18-NOV-1992  (first entry)
DE   Fragment of tenascin-related peptide.
KW   Tenascin; related peptide; cell attachment; antibody; angiogenesis;
KW   tumour metastasis; solid matrix; prosthetic device; vascular graft;
KW   percutaneous device.
PN   WO9207872-A.
PD   14-MAY-1992.
PF   29-OCT-1991; U08018.
PR   29-OCT-1990; US-605920.
PR   30-OCT-1990; US-605667.
PA   (CALB-) CALIFORNIA INST BIOLOGICAL RES.
PI   Bourdon MA;
DR   WPI; 92-183625/22.
PT   New tenascin-related peptides - modulate cell attachment to
PT   tenascin, useful in inhibition of tumour metastasis and
PT   angiogenesis
PS   Disclosure; page 8; 60pp; English.
CC   The peptide may form an N- or C-terminal fragment of the generic
CC   peptide of R24192, which is a tenascin-related peptide. This
CC   peptide mimics the ability of tenascin to promote cell attachment.
CC   The peptide and antibodies raised to it can be used to modulate cell
CC   attachment to tenascin, esp. to inhibit tumour metastasis and
CC   angiogenesis. The peptide is pref. attached to a solid matrix, eg
CC   collagen, nitrocellulose, polyester, glass, synthetic resin, long-chain
CC   polysaccharide or synthetic resin fibre. It is esp. operatively linked
CC   to a solid matrix forming a prosthetic device, percutaneous device,
CC   vascular graft, etc. For topical admin. it is formulated into a
CC   lotion, salve, gel, colloid, powder etc.
SQ   Sequence   6 AA;

  Query Match           97.6%;  Score 40;  DB 2;  Length 6;
  Best Local Similarity  83.3%;  Pred. No. 9.97e+01;
  Matches    5;  Conservative    1;  Mismatches   0;  Indels   0;  Gaps   0;

Db      1 grgdsp 6
          |||:||
Qy      1 GRGESP 6


RESULT   38
ID   W57198 standard; peptide; 6 AA.
AC   W57198;
DT   05-AUG-1998  (first entry)
DE   RGD-containing peptide SEQ ID NO:16 from WO9812226 Example 9.
KW   Fibronectin; superfibronectin; first type III repeat unit; IIII;
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KW   angiogenesis; psoriasis; rheumatoid arthritis; cancer; tumour.
OS   Synthetic.
PN   WO9812226-A1.
PD   26-MAR-1998.
PF   12-SEP-1997; U16344.
PR   20-SEP-1996; US-717169.
PA   (BURN-) BURNHAM INST.
PI   Pasqualini R, Ruoslahti E;
DR   WPI; 98-217210/19.
PT   Inhibition of angiogenesis by superfibronectin - useful for
PT   treating, e.g. psoriasis, rheumatoid arthritis and various cancers
PS   Example 9; Page 63; 105pp; English.
CC   A method has been developed of ameliorating cancer, or inhibiting
CC   angiogenesis, in a subject. The method comprises administering a
CC   superfibronectin or a superfibronectin-generating compound. The
CC   present sequence represents a peptide used in an example of the
CC   present invention. The method can be used to treat cancer, ocular
CC   neovascularisation, diabetic retinopathy, haemangioma, rheumatoid
CC   arthritis, psoriasis, granuloma, and granulation tissue. The cancer
CC   treated by the method can comprise a solid tumour, such as a melanoma,
CC   osteosarcoma, ovarian, vascular or epithelial cell tumour. When it is in
CC   an epithelial cell tumour, it is preferably a colon carcinoma, breast
CC   carcinoma, or ovarian carcinoma. When it is a vascular cell tumour, it is
CC   selected from haemangiomas, Kaposi's sarcoma, lymphangioma, glomangioma,
CC   angiosarcoma, or haemangioendothelioma. The method inhibits or prevents
CC   a tumour cell metastatis in a subject especially inhibits the tumour
CC   cell migration, attachment, or inhibiting growth of a tumour cell in a
CC   subject having a pathology with an angioproliferative component, where
CC   the inhibition causes regression of the pathology. The route of
CC   administration is intravenous, intramuscular, intradermal, subcutaneous,
CC   intracranial, intracerebrospinal, epidural, topical or oral
CC   administration.
SQ   Sequence   6 AA;

  Query Match           97.6%;  Score 40;  DB 31;  Length 6;
  Best Local Similarity  83.3%;  Pred. No. 9.97e+01;
  Matches     5;  Conservative    1;  Mismatches   0;  Indels   0;  Gaps   0;

Db      1 grgdsp 6
          |||:||
Qy      1 GRGESP 6


RESULT   39
ID   R29056 standard; peptide; 6 AA.
AC   R29056;
DT   17-FEB-1993  (first entry)
DE   Peptide contg. RGD motif as a side chain to a water sol. polymer.
KW   Adhesive peptide; cell adhesion; inhibitor; platelet aggregation.
OS   Synthetic.
FH   Key             Location/Qualifiers
FT   modified_site    1
FT                    /note= "alkylated/arylated"
FT   modified_site    6
FT                    /note= "alkylated/arylated"
PN   J04221397-A.
PD   11-AUG-1992.
PF   20-DEC-1990; 404484.
PR   20-DEC-1990; JP-404484.
PA   (FUJF ) FUJI PHOTO FILM CO LTD.
DR   WPI; 92-313681/38.
PT   Water-soluble vinyl polymer deriv.- for animal cell adhesion
PT   inhibitor or platelet aggregation inhibitor
PS   Example; Page 12; 14pp; Japanese.
CC   The  peptide sequence cotains the Arg-Gly-Asp motif of cell
CC   adhering proteins.  It comprises the essential unit of a
CC   water-sol. vinyl polymer with a pref. mol. wt. of 3000-100,000 D.
CC   The polymer shows various biological actvities, e.g. immunological
CC   coordination, wound healing action and  platelet aggregation inhibiting
CC   action etc.     See also R29055-61.
SQ   Sequence   6 AA;

  Query Match           97.6%;  Score 40;  DB 5;  Length 6;
  Best Local Similarity  83.3%;  Pred. No. 9.97e+01;
  Matches     5;  Conservative    1;  Mismatches   0;  Indels   0;  Gaps   0;

Db      1 grgdsp 6
          |||:||
Qy      1 GRGESP 6


RESULT   40
ID   W45883 standard; peptide; 6 AA.
AC   W45883;
DT   30-JUN-1998  (first entry)
DE   Peptide membrane binding element.
KW   Membrane binding element; thrombotic disease; soluble protein;
KW   complement-related disease; integral membrane protein; inflammation.
OS   Homo sapiens.
PN   WO9802454-A2.
PD   22-JAN-1998.
PF   08-JUL-1997; E03715.
PR   15-JUL-1996; GB-014871.
PA   (ADPR-) ADPROTECH PLC.
PI   Dodd I, Mossakowska DEI, Smith RAG;
DR   WPI; 98-110524/10.
PT   Derivatives of soluble poly:peptide(s) bonded to low affinity
PT   membrane binding groups - useful for treating complement-related and
PT   thrombotic diseases, providing improved localisation at cellular
PT   membranes
PS   Claim 12; Page 70; 75pp; English.
CC   The present peptide sequence represents a specifically claimed membrane
CC   binding element. The invention relates to a soluble derivative (A) of a
CC   soluble polypeptide (I), which comprises at least 2 heterologous
CC   membrane-binding elements (MBE) of low membrane affinity covalently
CC   associated with (I). MBE interact, independently and with thermodynamic
CC   additivity, with components of cellular or artificial membranes exposed
CC   to extracellular fluids. (A) are used to treat disorders treatable with
CC   (I) itself, specifically inflammation or any other complement-related
CC   disorder (e.g. neurological disease, graft rejection, myocardial
CC   infarction, sepsis, rheumatoid arthritis and many others; including
CC   application to indwelling devices) and thrombolytic disease, but also to
CC   treat allergy, induce weight loss, to treat ischaemia or asthma and as
CC   immuno-modulators for treating multiple sclerosis. (A) are administered
CC   orally, topically, by injection or inhalation at 0.01-10 (preferably
CC   0.1-10) mg/kg/day.
SQ   Sequence   6 AA;

  Query Match           97.6%;  Score 40;  DB 30;  Length 6;
  Best Local Similarity  83.3%;  Pred. No. 9.97e+01;
  Matches     5;  Conservative    1;  Mismatches   0;  Indels   0;  Gaps   0;

Db      1 grgdsp 6
          |||:||
Qy      1 GRGESP 6


RESULT   41
ID   W07431 standard; peptide; 6 AA.
AC   W07431;
DT   21-JAN-1997  (first entry)
DE   Synthetic, weak, tumour invasion-inhibitory peptide.
KW   Tumour invasion; extracellular matrix; ECM; metastasis; RGD sequence;
KW   cancer; inhibition; control.
OS   Synthetic.
PN   US5547936-A.
PD   20-AUG-1996.
PF   22-NOV-1983; 554821.
PR   22-NOV-1983; US-554821.
PR   17-JUN-1985; US-744981.
PR   10-MAR-1988; US-166530.
PR   09-SEP-1988; US-242713.
PR   25-FEB-1991; US-660526.
PR   10-APR-1991; US-683585.
PR   08-OCT-1991; US-773106.
PR   19-JUN-1992; US-902742.
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PR   17-DEC-1993; US-169743.
PA   (LJOL-) LA JOLLA CANCER RES FOUND.
PI   Gehlsen KR,  Pierschbacher MD,  Ruoslahti EI;
DR   WPI; 96-392651/39.
PT   Inhibiting tumour cell invasion through an extracellular matrix -
PT   using peptide contg. the RGD sequence, partic. for preventing tumour
PT   metastasis
PS   Example 1; Column 7-8; 8pp; English.
CC   W07431-W07433 are peptides identified in an assay for tumour-invasion
CC   inhibitory activity. The peptides (contg. the RGD sequence) show a
CC   weak inhibition of tumour invasion of the ECM. Another peptide tested
CC   (see W07430) showed a significant inhibitory activity. The peptides
CC   identified can be used to treat cancer and to prevent metastasis, in
CC   partic. invasion of the extracellular matrix (ECM).
CC   The peptides are soluble.
SQ   Sequence   6 AA;

  Query Match           97.6%;  Score 40;  DB 19;  Length 6;
  Best Local Similarity  83.3%;  Pred. No. 9.97e+01;
  Matches     5;  Conservative    1;  Mismatches   0;  Indels   0;  Gaps   0;

Db      1 grgdsp 6
          |||:||
Qy      1 GRGESP 6


RESULT   42
ID   W03680 standard; peptide; 6 AA.
AC   W03680;
DT   31-DEC-1996  (first entry)
DE   Fibronectin elution peptide.
KW   Fibronectin receptor; cell attachment site; therapeutic agent; tissue.
OS   Synthetic.
PN   US5540933-A.
PD   30-JUL-1996.
PF   31-MAY-1985; 740240.
PR   31-MAY-1985; US-740240.
PR   25-JAN-1989; US-302047.
PR   20-MAR-1992; US-857097.
PR   29-APR-1993; US-056815.
PA   (LJOL-) LA JOLLA CANCER RES FOUND.
PI   Pierschbacher MD,  Ruoslahti EI;
DR   WPI; 96-361919/36.
PT   Liposome for targeting fibronectin-contg. tissue contains
PT   glyco:protein - isolated from surface of human cells, also useful
PT   for detecting tissue contg. fibronectin
PS   Claim 1; Column 12; 15pp; English.
CC   The specification deals with a novel fibronectin receptor protein of
CC   mol. wt 140 kD under reducing SDS-PAGE and 120 kD under non-reducing
CC   SDS-PAGE, which binds to the cell attachment site in fibronectin and
CC   can be eluted from this attachment site by the peptide shown here.
CC   The elution peptide contains a sequence which mimics the attachment
CC   sequence of fibronectin to the receptor, i.e. Gly-Arg-Gly.
CC   The novel receptor can be used to deliver therapeutic agents to
CC   fibronectin-contg. tissues.
SQ   Sequence   6 AA;

  Query Match           97.6%;  Score 40;  DB 19;  Length 6;
  Best Local Similarity  83.3%;  Pred. No. 9.97e+01;
  Matches     5;  Conservative    1;  Mismatches   0;  Indels   0;  Gaps   0;

Db      1 grgdsp 6
          |||:||
Qy      1 GRGESP 6


RESULT   43
ID   W34089 standard; peptide; 6 AA.
AC   W34089;
DT   05-MAY-1998  (first entry)
DE   Beta-1 integrin cell surface receptor inhibitor peptide.
KW   Beta-1 integrin cell surface receptor; beta-1 integrin-binding domain;
KW   cancer; tenascin; inflammation; receptor stimulator; fibrin;
KW   inhibitor; leucocyte migration.
OS   Synthetic.
PN   WO9739773-A1.
PD   30-OCT-1997.
PF   22-APR-1997; U06577.
PR   22-APR-1996; US-635572.
PA   (UYCO ) UNIV COLUMBIA NEW YORK.
PI   Loike J, Silverstein SC;
DR   WPI; 97-535582/49.
PT   Treating infection caused by in-dwelling devices - also similar
PT   methods for treating cancers coated with tenascin and treating
PT   inflammation with receptor stimulators
PS   Claim 15; Page 63; 91pp; English.
CC   A novel method has been developed for treating infection caused by
CC   bacteria on the surface of an in-dwelling foreign body, over and
CC   around which fibrin has been deposited. The method comprises
CC   administration of an agent that inhibits signalling mediated by a
CC   beta 1-integrin cell surface receptor on leucocytes. The agent enhances
CC   migration of leucocytes in and through the fibrin so that they can
CC   reach and kill the bacteria. The present sequence represents a
CC   specifically claimed peptide which contains a beta-1 integrin-binding
CC   domain. Treatment with the agent overcomes the inhibitory effects of
CC   fibrin or tenascin on leucocyte migration.
SQ   Sequence   6 AA;

  Query Match           97.6%;  Score 40;  DB 28;  Length 6;
  Best Local Similarity  83.3%;  Pred. No. 9.97e+01;
  Matches     5;  Conservative    1;  Mismatches   0;  Indels   0;  Gaps   0;

Db      1 grgdsp 6
          |||:||
Qy      1 GRGESP 6


RESULT   44
ID   W65003 standard; peptide; 6 AA.
AC   W65003;
DT   10-SEP-1998  (first entry)
DE   Synthetic osteoclast attachment blocking peptide.
KW   Angiogenesis; inhibitor; alpha-v beta-3 integrin receptor; treatment;
KW   disease; diagnosis; immunoassay; detection; cancer; inflammation;
KW   rheumatoid arthritis; osteoporosis; restenosis; retinopathy; glaucoma;
KW   retinal neovascularisation; diabetic retinopathy; macular degeneration.
OS   Synthetic.
PN   US5780426-A.
PD   14-JUL-1998.
PF   07-JUN-1995; 482107.
PR   07-JUN-1995; US-482107.
PA   (IXSY-) IXSYS INC.
PI   Huse WD, Lee BA, Palladino MA, Varner JA;
DR   WPI; 98-413114/35.
PT   New non-RGD peptides with specific affinity for the alphav, beta3
PT   integrin receptor - contain specific pentapeptide sequence, used for
PT   treatment or prevention of particularly angiogenic disorders such as
PT   cancer, inflammation, osteoprosis etc.
PS   Disclosure; Column 2; 20pp; English.
CC   W65001-W65010 are synthetic peptides used in an assay to determine which
CC   peptides bind to and inhibit the alpha-v beta-3 integrin receptor. Such
CC   inhibitors could be used to treat or prevent diseases mediated by the
CC   alpha-v beta-3 integrin receptor, particularly angiogenic diseases, e.g.
CC   cancer and their metastases, inflammation, rheumatoid arthritis,
CC   osteoporosis, restenosis, retinal neovascularisation (glaucoma), diabetic
CC   retinopathy and macular degeneration. The peptides are also useful for
CC   diagnosis of such diseases by detecting or quantifying the receptor in
CC   samples and can be used to raise antibodies useful as immunoassay
CC   reagents.
SQ   Sequence   6 AA;

  Query Match           97.6%;  Score 40;  DB 33;  Length 6;
  Best Local Similarity  83.3%;  Pred. No. 9.97e+01;
  Matches     5;  Conservative    1;  Mismatches   0;  Indels   0;  Gaps   0;

Db      1 grgdsp 6
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Qy      1 GRGESP 6


RESULT   45
ID   R29063 standard; peptide; 6 AA.
AC   R29063;
DT   17-FEB-1993  (first entry)
DE   Peptide contg. RGD motif as a side chain to a water sol. polymer.
KW   Adhesive peptide; cell adhesion; inhibitor; platelet aggregation.
OS   Synthetic.
FH   Key             Location/Qualifiers
FT   modified_site    1
FT                    /note= "alkylated/arylated"
FT   modified_site    6
FT                    /note= "alkylated/arylated"
PN   J04221396-A.
PD   11-AUG-1992.
PF   20-DEC-1990; 404347.
PR   20-DEC-1990; JP-404347.
PA   (FUJF ) FUJI PHOTO FILM CO LTD.
DR   WPI; 92-313680/38.
PT   Water-soluble vinyl polymer deriv.- for animal cell adhesion
PT   inhibitor or platelet aggregation inhibitor
PS   Example; Page 12; 14pp; Japanese.
CC   The  peptide sequence cotains the Arg-Gly-Asp motif of cell
CC   adhering proteins.  It comprises the essential unit of a
CC   water-sol. vinyl polymer with a pref. mol. wt. of 3000-100,000 D.
CC   The polymer shows various biological actvities, e.g. immunological
CC   coordination, wound healing action and  platelet aggregation inhibiting
CC   action etc.      See also R29062-8.
SQ   Sequence   6 AA;

  Query Match           97.6%;  Score 40;  DB 5;  Length 6;
  Best Local Similarity  83.3%;  Pred. No. 9.97e+01;
  Matches     5;  Conservative    1;  Mismatches   0;  Indels   0;  Gaps   0;

Db      1 grgdsp 6
          |||:||
Qy      1 GRGESP 6


RESULT   46
ID   R35465 standard; peptide; 6 AA.
AC   R35465;
DT   26-AUG-1993  (first entry)
DE   Propene-amide deriv. polymer metastasis inhibitor.
KW   Low toxicity; higher cell adhesion ability; metastasis inhibition.
OS   Synthetic.
FH   Key             Location/Qualifiers
FT   modified_site    1
FT                    /note= "CH2=CCH3CO-Gly"
PN   J05097699-A.
PD   20-APR-1993.
PF   04-OCT-1991; 258095.
PR   04-OCT-1991; JP-258095.
PA   (FUJF ) FUJI PHOTO FILM CO LTD.
DR   WPI; 93-164370/20.
PT   Low toxicity metastasis inhibitor - composed of propene-amide
PT   deriv. polymer or its pharmacologically acceptable salts
PS   Claim 1; Page 2; 12pp; Japanese.
CC   The sequence is that of a polymer of propene amide deriv. which has
CC   a higher cell adhesion ability, compared with that of the core
CC   sequence of cell adhesive protein. It has various kinds of
CC   biological activities e.g. metastasis inhibition and has low
CC   toxicity.
SQ   Sequence   6 AA;

  Query Match           97.6%;  Score 40;  DB 7;  Length 6;
  Best Local Similarity  83.3%;  Pred. No. 9.97e+01;
  Matches     5;  Conservative    1;  Mismatches   0;  Indels   0;  Gaps   0;

Db      1 grgdsp 6
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Qy      1 GRGESP 6


RESULT   47
ID   R92740 standard; peptide; 6 AA.
AC   R92740;
DT   03-SEP-1996  (first entry)
DE   RGD-containing sequence, for controlling cell distribution.
KW   Control; distribution; bioartificial organ; BAO; cellular attachment;
KW   neurotransmitter; hormone; cytokine; growth factor; enzyme.
OS   Synthetic.
FH   Key             Location/Qualifiers
FT   peptide          2..4
FT                    /note= "Claimed core peptide"
PN   WO9602646-A2.
PD   01-FEB-1996.
PF   20-JUL-1995; U09281.
PR   20-JUL-1994; US-279773.
PR   09-MAY-1995; US-432698.
PA   (CYTO-) CYTOTHERAPEUTICS INC.
PI   Aebischer P,  Cain BM,  Doherty EJ,  Gentile FT,  Hammang JP;
PI   Holland LM, Schinstine M,  Shoichet MS,  Winn SR;
DR   WPI; 96-105908/11.
PT   Controlling distribution of cells in bio-artificial organs - e.g. by
PT   treatment of cells, or growth surfaces, to inhibit proliferation,
PT   promote differentiation or modulate adhesion, for in vivo prodn. of
PT   hormones, neuro-transmitter(s) etc
PS   Claim 22; Page 70; 84pp; English.
CC   The sequences given in R92739-41 are peptides which were used in the
CC   method of the invention to control the distribution of cells within
CC   a bioartificial organ (BAO).  These peptides have been particularly
CC   useful in promoting cellular attachment.  These peptides are pref.
CC   bound to the membrane of the BAO which is a biocompatible,
CC   permselective jacket.  These peptides act to control the distribution
CC   of the core of living cells included in the BAO after in vivo
CC   implantation.  BAO are used therapeutically to produce e.g.
CC   neurotransmitters, hormones, cytokines, growth factors, enzymes, etc.
SQ   Sequence   6 AA;

  Query Match           97.6%;  Score 40;  DB 17;  Length 6;
  Best Local Similarity  83.3%;  Pred. No. 9.97e+01;
  Matches     5;  Conservative    1;  Mismatches   0;  Indels   0;  Gaps   0;

Db      1 grgdsp 6
          |||:||
Qy      1 GRGESP 6


RESULT   48
ID   R37834 standard; Protein; 6 AA.
AC   R37834;
DT   12-OCT-1993  (first entry)
DE   Cell adhesion motif encoded by insert 74RGD6.
KW   Fibronectin; cell-cell adhesion; Arg-Gly-Asp motif; human lysozyme;
KW   bacteriolysis.
OS   Synthetic.
FH   Key             Location/Qualifiers
FT   binding_site     2..5
FT                    /label= cell_adhesion_motif
PN   J05115284-A.
PD   14-MAY-1993.
PF   29-OCT-1991; 282866.
PR   29-OCT-1991; JP-282866.
PA   (FUJI-) FUJITA GAKUEN GH.
PA   (TANP-) TANPAKU KOGAKU KENKYUSHO KK.
DR   WPI; 93-190693/24.
DR   N-PSDB; Q42608.
PT   New mutant human lysozyme, - is incorporated into chimeric
PT   protein for use in analysing high order structure of aminoacid
PT   sequence contg. cell adhesive function site
PS   Example 1; Page 6; 10pp; Japanese.
CC   The double-stranded DNA 74RGD6 is one of 5 preferred sequences, each
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CC   coding for a cell-adhesion motif, which can be inserted between
CC   the codons for Val 74 and Asn 75 of human lysozyme. The resulting
CC   mutant lysozyme polypeptide has cell adhesion properties in
CC   addition to its bacteriolytic ability. See Q42607-Q42611.
SQ   Sequence   6 AA;

  Query Match           97.6%;  Score 40;  DB 7;  Length 6;
  Best Local Similarity  83.3%;  Pred. No. 9.97e+01;
  Matches    5;  Conservative    1;  Mismatches   0;  Indels   0;  Gaps   0;

Db      1 grgdsp 6
          |||:||
Qy      1 GRGESP 6


RESULT   49
ID   R49801 standard; peptide; 6 AA.
AC   R49801;
DT   23-AUG-1994  (first entry)
DE   Sequence of peptide which binds to fibrinogen receptor GpIIbIIIa.
KW   Random degradation; recombination; scrambling reaction.
OS   Synthetic.
PN   WO9404558-A.
PD   03-MAR-1994.
PF   09-AUG-1993; U08231.
PR   21-AUG-1992; US-932200.
PA   (RECE-) RECEPTOR LAB INC.
PI   Hopfinger AJ,  Venton DL;
DR   WPI; 94-083103/10.
PT   Identifying peptides which binds to a specific target - by
PT   contacting target with scrambled equilibrium mixt. of many
PT   peptide derived from protein by incubation with protease, for
PT   detecting potential therapeutic agents
PS   Example; Table 6, Page 64; 97pp; English.
CC   The inventors claim a method for inexpensively and rapidly producing
CC   a large and varied population of peptides and screening this varied
CC   population for the presence of peptides which bind to a target, for
CC   example, a macromolecule associated with a particular physiological
CC   function. The specific binding peptides are isolated and sequenced,
CC   synthesised on a large-scale, their biological activity is
CC   demonstrated, and then subjected to clinical testing. The random
CC   population of peptides is generated by employing a scrambling system
CC   which utlises one or more proteases, esp. papain, pepsin, bromelin,
CC   thermolysin, trypsin, pronase, chymotrypsin, subtilisn and dipeptidyl
CC   peptidase IV. A typical starting protein is casein. Targets are
CC   esp. receptors involved in physiological processes, partic.
CC   fibrinogen; sickle cell haemoglobin; collagenase IV; rennin; Gp.
CC   IIb IIIa or phospholipase A2. Fibrinogen receptor GpIIbIIIa binds
CC   to many RGD contg. peptides such as RGDW, RGDY and RGDM. In the
CC   example, a GpIIbIIIa binding system is coupled to a system for
CC   scrambling a mixture of RD, WY and GSF peptides with thermolysin
CC   and bromelain. Isolation of RGD peptides bound to the receptor
CC   would constitute proof of the activity of the scrambling system.
SQ   Sequence   6 AA;

  Query Match           97.6%;  Score 40;  DB 9;  Length 6;
  Best Local Similarity  83.3%;  Pred. No. 9.97e+01;
  Matches    5;  Conservative    1;  Mismatches   0;  Indels   0;  Gaps   0;

Db      1 grgdsp 6
          |||:||
Qy      1 GRGESP 6


RESULT   50
ID   R25425 standard; peptide; 6 AA.
AC   R25425;
DT   06-JAN-1993  (first entry)
DE   Peptide deriv. contg. RGD motif.
KW   Phosphodiester; liposomes; micelles; fibronectin; cell adhesion;
KW   targetting; tumour metastasis; agglutination; platelets; lymphocytes.
OS   Synthetic.
PN   J04164095-A.
PD   09-JUN-1992.
PF   26-OCT-1990; 289490.
PR   26-OCT-1990; JP-289490.
PA   (FUJF ) FUJI PHOTO FILM CO LTD.
DR   WPI; 92-239950/29.
PT   New peptide contg. arginine-glycine-aspartic acid sequence -
PT   useful in prepn. of liposome or micelles used to suppress tumour
PT   metastasis, since sequence is activation site of fibronectin
PS   Rxample 1; Page 4; 9pp; Japanese.
CC   The peptide is part of a phosphodiester bond which also comprises a
CC   hydrophobic organic gp. e.g. an isoprenoid or glycerolipid.  The
CC   new derivs. of the peptide contg. the Arg-Gly-Asp sequence are
CC   useful for the prepn. of liposomes or micelles contg. the RGD
CC   sequence.  The RGD sequence is an activation site of fibronectin
CC   which is a cell adhesion mol.  The liposomes are useful for the
CC   suppression of tumour metastasis, agglutination of platelets, and
CC   activation of lymphocytes.  They are useful for targetting anti-
CC   tumour drugs onto tumours.
CC   See also R25426.
SQ   Sequence   6 AA;

  Query Match           97.6%;  Score 40;  DB 5;  Length 6;
  Best Local Similarity  83.3%;  Pred. No. 9.97e+01;
  Matches    5;  Conservative    1;  Mismatches   0;  Indels   0;  Gaps   0;

Db      1 grgdsp 6
          |||:||
Qy      1 GRGESP 6


RESULT   51
ID   W35452 standard; peptide; 6 AA.
AC   W35452;
DT   22-APR-1998  (first entry)
DE   Non-dendritic peptide carrier binding activity fragment.
KW   T-cell stimulatory peptide; immunogen; non-dendritic; carrier; tumour;
KW   scaffold; inhibition; metastasis; wound healing; solid phase.
OS   Unidentified.
PN   WO9738011-A1.
PD   16-OCT-1997.
PF   03-APR-1997; D00146.
PR   03-APR-1996; DK-000398.
PA   (PEPR-) PEPRESEARCH AS.
PI   Heegaard PMH, Jakobsen PH;
DR   WPI; 97-512645/47.
PT   Non-dendritic peptide carrier linked to a solid phase - useful as a
PT   diagnostic agent and as a scaffold for production of chemical
PT   derivatives
PS   Claim 51; Page 203; 262pp; English.
CC   A non-dendritic peptide carrier (A) has been developed which is coupled
CC   through a linker to a solid phase, forming a complex of (A)-solid phase.
CC   Where (A) comprises 10-50 amino acids capable of forming a secondary
CC   structure in a benign buffer after liberation from the solid phase, and
CC   further the (A)-solid phase complex comprises an immunogenic substance
CC   and/or an immune mediator coupled on (A). The present sequence
CC   represents a specifically claimed non-dendritic peptide carrier binding
CC   activity fragment from the invention. An (A)-solid phase complex can
CC   be used as a scaffold for the production of chemical derivatives,
CC   characterised by covalently attaching molecules at attachment points.
CC   Alternatively (A) is used as a scaffold-peptide for the incorporation
CC   into an Immunostimulating Complex (Iscom) resulting an (A)-Iscom complex
CC   which is used for the chemical coupling of antigenic substances in an
CC   aqueous solution by conjugation. (A) derivatised with one or more
CC   peptides having fibronectin-, laminin- or vitronectin-like binding
CC   activities can be used for the promotion of cell-attachment to plastic
CC   surfaces, in particular to inhibit tumour growth and metastasis, and for
CC   promotion of wound healing. Also a derivatised (A) can be used for the
CC   selection of specifically-binding aptamers or as a diagnostic agent.
CC   Such diagnostic-(A) molecules could be used to detect molecules derived
CC   from or indicative of pregnancy or of a disease, such as an infectious,
CC   autoimmune or cancerous disease.
SQ   Sequence   6 AA;
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  Query Match           97.6%;  Score 40;  DB 27;  Length 6;
  Best Local Similarity  83.3%;  Pred. No. 9.97e+01;
  Matches    5;  Conservative    1;  Mismatches   0;  Indels   0;  Gaps   0;

Db      1 grgdsp 6
          |||:||
Qy      1 GRGESP 6


RESULT   52
ID   R80966 standard; peptide; 6 AA.
AC   R80966;
DT   24-APR-1996  (first entry)
DE   RGD contg. peptide used in integrin binding studies.
KW   Integrin; chimeric; extracellular; transmembrane; cytoplasmic;
KW   ligand; activation inhibitor; inflammation; autoimmune disease;
KW   transplantation; thrombus; cancer.
OS   Homo sapiens.
PN   WO9525173-A1.
PD   21-SEP-1995.
PF   06-MAR-1995; U02885.
PR   14-MAR-1994; US-214770.
PA   (SCRI ) SCRIPPS RES INST.
PI   Ginsberg MH,  O'Toole TE;
DR   WPI; 95-336977/43.
PT   Chimeric integrin mol. comprising reporter and target integrin
PT   domains - for identifying integrin activation inhibitors which are
PT   useful for treating or preventing unwanted immune responses
PS   Disclosure; Page 12; 50pp; English.
CC   Chimeric integrin molecules comprising the extracellular and
CC   transmembrane domains of a reporter integrin (RI) fused to the cyto-
CC   plasmic domain of a target integrin (TI). The RI is pref. from
CC   alphaIIb-beta3 and the TI is pref. chosen from alphaV-beta3, alphaM-
CC   beta2, alpha1-beta2, alpha2-beta1, alpha5-beta1, alpha6a-beta1,
CC   alphaIIb-beta3 or alpha4-beta1. This sequence is used in cell
CC   binding assays to determine the cell-type specificity of the
CC   chimeric integrins. The chimeric integrins are useful for
CC   identifying TI inhibitors which can be used to treat mammalian
CC   cancers, thrombosis or any unwanted immune respone, e.g.
CC   inflammation; autoimmune disease; allergies or organ/tissue
CC   transplant rejection.
SQ   Sequence   6 AA;

  Query Match           97.6%;  Score 40;  DB 15;  Length 6;
  Best Local Similarity  83.3%;  Pred. No. 9.97e+01;
  Matches    5;  Conservative    1;  Mismatches   0;  Indels   0;  Gaps   0;

Db      1 grgdsp 6
          |||:||
Qy      1 GRGESP 6


RESULT   53
ID   R36708 standard; peptide; 6 AA.
AC   R36708;
DT   26-AUG-1993  (first entry)
DE   Adhesion formation prevention RGD-contg. peptide.
KW   Tissue repair; peritoneum; surgery; post-surgically; inhibition;
KW   platelet aggregation; cardiovascular; orthopedic; thoracic;
KW   ophthalmic; CNS; use.
OS   Synthetic.
PN   WO9308818-A.
PD   13-MAY-1993.
PF   06-NOV-1992; U09494.
PR   07-NOV-1991; US-789231.
PA   (UYSC-) UNIV SOUTHERN CALIFORNIA.
PI   Dizerega GS, Rodgers KE;
DR   WPI; 93-167381/20.
PT   Prevention of adhesion formation, partic. post-surgically - comprises
PT   administering a RGD-contg. peptide for a time sufficient to permit
PT   tissue repair
PS   Example; Page 18; 22pp; English.
CC   The sequence is that of an RGD-contg. peptide which is used in a
CC   method for prevention of adhesion formation for a time sufficient
CC   to permit tissue repair. The method is used for minimising or
CC   preventing adhesion formation, partic. in the peritoneum following
CC   surgery, but also for e.g. cardiovascular, orthopedic, thoracic,
CC   ophthalmic, CNS and other uses. In addn., the peptide inhibits
CC   platelet aggregation and does not induce inflammation or trauma
CC   at the site of administration.
SQ   Sequence   6 AA;

  Query Match           97.6%;  Score 40;  DB 7;  Length 6;
  Best Local Similarity  83.3%;  Pred. No. 9.97e+01;
  Matches    5;  Conservative    1;  Mismatches   0;  Indels   0;  Gaps   0;

Db      1 grgdsp 6
          |||:||
Qy      1 GRGESP 6


RESULT   54
ID   R70654 standard; peptide; 6 AA.
AC   R70654;
DT   26-JUN-1995  (first entry)
DE   Synthetic RGD peptide inhibits intercellular adhesion by fibronectin.
KW   RGD peptide; competitor; fibronectin; inhibition; RGD-lipid derivative;
KW   intercellular adhesion; suppress transfer of cancer cell; liposome.
OS   Synthetic.
FH   Key             Location/Qualifiers
FT   modified_site   1
FT                   /note= "Cholesterol-CO-Gly or H-Gly"
FT   modified_site   6
FT                   /note= "Pro-OH"
PN   J06219967-A.
PD   09-AUG-1994.
PF   22-JAN-1993; 009290.
PR   22-JAN-1993; JP-009290.
PA   (DDSK-) DDS KENKYUSHO KK.
DR   WPI; 94-312661/39.
PT   New peptide-lipid derivs. bound directly or via linker to lipid -
PT   useful for inhibiting mouse lung cancer cell line, 3LL cell
PT   adhesion by fibronectin
PS   Example; Page 9; 12pp; Japanese.
CC   R70651-56 are RGD contg. peptides that can bind to cancer cells. The
CC   exogenous peptides compete with fibronectin and inhibit
CC   intercellular adhesion by fibronectin. The peptides are bound
CC   directly or via a linker to a lipid. A liposome suspension contg.
CC   RGD peptide was found to effectively suppress 3LL cell adhesion by
CC   fibronectin, in the mouse lung cancer cell line.
SQ   Sequence   6 AA;

  Query Match           97.6%;  Score 40;  DB 12;  Length 6;
  Best Local Similarity  83.3%;  Pred. No. 9.97e+01;
  Matches    5;  Conservative    1;  Mismatches   0;  Indels   0;  Gaps   0;

Db      1 grgdsp 6
          |||:||
Qy      1 GRGESP 6


RESULT   55
ID   R36710 standard; peptide; 6 AA.
AC   R36710;
DT   26-AUG-1993  (first entry)
DE   Adhesion formation prevention RGD-contg. peptide.
KW   Tissue repair; peritoneum; surgery; post-surgically; inhibition;
KW   platelet aggregation; cardiovascular; orthopedic; thoracic;
KW   ophthalmic; CNS; use.
OS   Synthetic.
FH   Key             Location/Qualifiers
FT   modified_site   5
FT                   /label= D-Ser
PN   WO9308818-A.
PD   13-MAY-1993.
PF   06-NOV-1992; U09494.
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PR 07-NOV-1991; US-789231.
PA (UYSC-) UNIV SOUTHERN CALIFORNIA.
PI Dizerega GS, Rodgers KE;
DR WPI; 93-167381/20.
PT Prevention of adhesion formation, partic. post-surgically - comprises
PT administering a RGD-contg. peptide for a time sufficient to permit
PT tissue repair
PS Example; Page 18; 22pp; English.
CC The sequence is that of an RGD-contg. peptide which is used in a
CC method for prevention of adhesion formation for a time sufficient
CC to permit tissue repair. The method is used for minimising or
CC preventing adhesion formation, partic. in the peritoneum following
CC surgery, but also for e.g. cardiovascular, orthopedic, thoracic,
CC ophthalmic, CNS and other uses. In addn., the peptide inhibits
CC platelet aggregation and does not induce inflammation or trauma
CC at the site of administration.
SQ Sequence 6 AA;

Query Match 97.6%; Score 40; DB 7; Length 6;
Best Local Similarity 83.3%; Pred. No. 9.97e+01;
Matches 5; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

Db 1 grgdsp 6
||| :||
Qy 1 GRGESP 6

RESULT 56
ID R57890 standard; peptide; 6 AA.
AC R57890;
DT 29-MAR-1995 (first entry)
DE Binding site derived from Fab antibody HCDR3.
KW Binding site; CDR; complementarity determining region; immunoglobulin;
KW heavy; light; primer extension; PCR; amplify; fibronectin; vitronectin;
KW RGD-dependant; integrin ligand; von Willebrand factor; EBV; gp350/220;
KW envelope gylcoprotein; HIV; gp120; reovirus; hemagglutinin; insulin;
KW cellular receptor; CR2; CD4; hormone; thyroid stimulating hormone; TSH;
KW transferrin; apolipoprotein; apo E; apo AI; MHC; class I; class II;
KW non-RGD-dependent; vitronectin receptor; alpha-v, beta-3; modulation;
KW anti-gpIIb/IIIa; monoclonal antibody; MAb; platelet adhesion; cancer;
KW coagulation; inflammation; anti-vitronectin; tumour cell adhesion;
KW migration.
OS Synthetic.
PN WO9418221-A.
PD 18-AUG-1994.
PF 02-FEB-1994; U01258.
PR 02-FEB-1993; US-012566.
PR 28-JUN-1993; US-084542.
PA (SCRI) SCRIPPS RES INST.
PI Barbas CF, Lerner RA;
DR WPI; 94-279675/34.
PT Production of binding sites within CDR regions of immunoglobulins
PT - displayed on the surface of filamentous phage particles, for
PT inhibiting platelet aggregation and vitronectin binding
PS Example 5; Page 142; 207pp; English.
CC This sequence represents a conserved binding site which may be used
CC in the method of the invention for producing a polypeptide having a
CC binding site capable of binding a preselected agent. Nucleotide
CC sequences encoding these binding site peptides were introduced into
CC a CDR region of a nucleic acid encoding an immunoglobulin heavy (H)
CC or light (L) chain, by amplifying the CDR region by primer extension.
CC Preferred binding sites are derived from the RGD-dependant integrin
CC ligands, eg. fibronectin, vitronectin, von Willebrand factor, from
CC the envelope gylcoprotein from viruses such as HIV gp120, EBV gp350/
CC 220, reovirus hemagglutinin, from cellular receptors such as CR2 or
CC CD4, from protein hormones such as thyroid stimulating hormone (TSH),
CC insulin, transferrin, from apolipoproteins such as apo E and apo AI,
CC from immunoglobulin CDRs and from MHC class I or II proteins. Non-RGD-
CC dependent integrin binding sites were selected for the affinity to bind
CC vitronectin receptor alpha-v, beta-3. An anti-gpIIb/IIIa monoclonal
CC antibody (MAb) produced in this way can be used to modulate platelet
CC adhesion in the treatment of coagulation and some inflammatory responses.
CC An anti-vitronectin MAb can be used in the treatment of cancer by
CC blocking tumour cell adhesion and migration. This sequence represents
CC an RGD-dependant binding site which has been shown to bind the human
CC vitronectin receptor (VnR) alpha-v, beta-3 when present in a phagemid
CC display protein.
SQ Sequence 6 AA;

Query Match 97.6%; Score 40; DB 11; Length 6;
Best Local Similarity 83.3%; Pred. No. 9.97e+01;
Matches 5; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

Db 1 grgdsp 6
||| :||
Qy 1 GRGESP 6

RESULT 57
ID R26814 standard; peptide; 6 AA.
AC R26814;
DT 18-FEB-1993 (first entry)
DE Polyethylene glycol derivative #5.
KW triazine ring; methoxy-polyethyleneoxy group; fibronectin; vibronectin;
KW platelet adhesion; metastasis; neuropathy.
OS Synthetic.
PN J04217693-A.
PD 07-AUG-1992.
PF 30-NOV-1990; 333717.
PR 23-OCT-1990; JP-285172.
PA (FUJF) FUJI PHOTO FILM CO LTD.
DR WPI; 92-312284/38.
PT Polyethylene glycol derivs. contg. peptide(s) - inhibit cellular
PT adhesion for fibronectin or vitronectin and are used to inhibit
PT agglutination or adhesion of platelets
PS Disclosure; Page 4; 9pp; Japanese.
CC The sequences given in R26810-14 are examples of a peptide chain
CC which is attached once or twice to a triazine ring which is also
CC substituted twice or once, respectively, with a methoxy-polyethyleneoxy
CC group. These peptides can be used to inhibit cellular adhesion to
CC fibronectin or vitronectin and they are useful as inhibitors for
CC agglutination or adhesion of platelets. They can also be useful as
CC inhibitors for metastsis of cancers, inhibitors of agglutination of
CC platelets caused by tumour cells in the blood capillaries, and drugs
CC acting on neuropathy.
SQ Sequence 6 AA;

Query Match 97.6%; Score 40; DB 5; Length 6;
Best Local Similarity 83.3%; Pred. No. 9.97e+01;
Matches 5; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

Db 1 grgdsp 6
||| :||
Qy 1 GRGESP 6

RESULT 58
ID R70478 standard; peptide; 6 AA.
AC R70478;
DT 20-DEC-1995 (first entry)
DE Cancer metastasis inhibitory RGD peptide derivative #6.
KW Cancer metastasis; adhesive peptide; core sequence; dextran; cancer;
KW water soluble polysaccharide; metastasis; wound; immunogenicity.
OS Synthetic.
PN J07089999-A.
PD 04-APR-1995.
PF 17-SEP-1993; 254779.
PR 17-SEP-1993; JP-254779.
PA (JAPG) NIPPON ZEON KK.
DR WPI; 95-167254/22.
PT Cancer metastasis inhibitive peptide derivs. - useful for inhibition
PT of cancer metastasis, healing of wounds and regulation of
PT immunogenicity.
PS Disclosure; Page 2; 6pp; Japanese.
CC The peptides R70472-90 and R82907-24 are peptide derivatives which
CC inhibit cancer metastasis. They are composed of an adhesive peptide with

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CC   a core sequence selected from: RGD (R70472-85), YIGSR (R70486-90) or
CC   other sequence (R82907-24), linked to a water soluble polysaccharide,
CC   preferably a water soluble dextran, at the C-terminus. The peptides are
CC   useful in inhibiting cancer metastasis, healing wounds and the regulation
CC   of immunogenicity.
SQ   Sequence   6 AA;

  Query Match           97.6%;  Score 40;  DB 14;  Length 6;
  Best Local Similarity  83.3%;  Pred. No. 9.97e+01;
  Matches     5;  Conservative    1;  Mismatches   0;  Indels   0;  Gaps   0;

Db      1 grgdsp 6
          |||:||
Qy      1 GRGESP 6


RESULT   59
ID   R88570 standard; peptide; 6 AA.
AC   R88570;
DT   04-SEP-1996  (first entry)
DE   RGD-containing sequence, for controlling cell proliferation.
KW   Laminin-derived peptide; bioartificial; regeneration; nerve;
KW   3-D hydrogel extracellular matrix; proliferation; neurite;
KW   replacement; cartilage; tendon; muscle; bone; skin.
OS   Synthetic.
FH   Key             Location/Qualifiers
FT   peptide         2..4
FT                   /note= "Claimed core peptide, claim 2"
PN   WO9602286-A1.
PD   01-FEB-1996.
PF   20-JUL-1995; U09282.
PR   20-JUL-1994; US-280646.
PA   (CYTO-) CYTOTHERAPEUTICS INC.
PI   Aebischer P,  Bellamkonda RV,  Ranieri JP;
DR   WPI; 96-105660/11.
PT   Bio-artificial 3-D hydrogel extracellular matrix comprising hydrogel
PT   derivatised with adhesion molecules - useful for promoting in vivo
PT   regeneration of severed nerves, tissue replacement and cell
PT   manipulation
PS   Claim 42; Page 497; 65pp; English.
CC   The sequences given in R88569-71 are laminin-derived peptides which
CC   were used in the bioartificial 3-D hydrogel extracellular matrix
CC   of the invention to control the distribution of cells.  These peptides
CC   are particularly useful in promoting cellular proliferation in neurites.
CC   These peptides are used to derivatise the hydrogel.  The hydrogel is a
CC   polysaccharide and has a pore radius of > 120 nm, pref. 150 nm.  The
CC   hydrogel is useful for promoting in vivo regeneration of a severed
CC   nerve.  It may have cells suspended in it and may be used to promote
CC   in vivo replacement of cartilage, tendon, muscle, bone or skin.
SQ   Sequence   6 AA;

  Query Match           97.6%;  Score 40;  DB 17;  Length 6;
  Best Local Similarity  83.3%;  Pred. No. 9.97e+01;
  Matches     5;  Conservative    1;  Mismatches   0;  Indels   0;  Gaps   0;

Db      1 grgdsp 6
          |||:||
Qy      1 GRGESP 6


RESULT   60
ID   R04612 standard; protein; 6 AA.
AC   R04612;
DT   05-SEP-1990  (first entry)
DE   Antiviral agent.
KW   Antiviral; M2; poliovirus; polio; heatitis.
OS   Synthetic.
PN   J02078631-A.
PD   19-MAR-1990.
PF   14-SEP-1988; 228843.
PR   14-SEP-1988; JP-228843.
PA   (NIHA) Nippon Mining KK.
DR   WPI; 90-129060/17.
PT   Antiviral agent contg. tri:peptide (unit) -
PT   of basic aminoacid, then alanine, glycine or sarcosine, and
PT   acidic aminoacid, effective against virus with protein-terminated DNA
PT   or RNA.
PS   Disclosure; 4pp; Japanese.
CC   Peptide is effective against inhibiting propogation of DNA or RNA
CC   bonded, protein containing viruses eg. Poliovirus, Hepatitis virus.
SQ   Sequence   6 AA;

  Query Match           97.6%;  Score 40;  DB 1;  Length 6;
  Best Local Similarity  83.3%;  Pred. No. 9.97e+01;
  Matches     5;  Conservative    1;  Mismatches   0;  Indels   0;  Gaps   0;

Db      1 grgdsp 6
          |||:||
Qy      1 GRGESP 6


RESULT   61
ID   W25186 standard; peptide; 6 AA.
AC   W25186;
DT   05-JAN-1998  (first entry)
DE   RGD-peptide capable of binding cell adhesion molecules.
KW   RGD; arginine; glycine; aspartic acid; cell adhesion molecule;
KW   binding; bladder irrigation; tumour removal; endoscopic operation;
KW   transurethral resection; cancer; neoplasia.
OS   Synthetic.
PN   DE19529909-A1.
PD   20-FEB-1997.
PF   15-AUG-1995; 029909.
PR   15-AUG-1995; DE-029909.
PA   (FREP ) FRESENIUS AG.
PI   Boehle A;
DR   WPI; 97-133793/13.
PT   Endoscopic irrigation solns. - contg. peptide(s) that bind to cell
PT   adhesion molecules
PS   Claim 5; Page 8; 8pp; German.
CC   W25173-W25186 are peptides containing an RGD sequence or equivalent.
CC   The peptides are capable of binding to cell adhesion molecules and
CC   are used in aqueous irrigation solutions for use during and after
CC   endoscopic operations. Preferred irrigation solutions are
CC   electrolyte-free and contain 1 microg/ml to 100 mg/ml of one or more
CC   oligopeptides containing the amino acid sequences: RGD, LDV, IDA, DGEA,
CC   GPRP, VTL, YIGSR, KQAGDV and/or REDV (given in one letter amino acid
CC   code). The solutions are especially used for irrigating the bladder
CC   during and after tumour removal by transurethral resection. The
CC   peptides protect against recurrence of tumours.
SQ   Sequence   6 AA;

  Query Match           97.6%;  Score 40;  DB 24;  Length 6;
  Best Local Similarity  83.3%;  Pred. No. 9.97e+01;
  Matches     5;  Conservative    1;  Mismatches   0;  Indels   0;  Gaps   0;

Db      1 grgdsp 6
          |||:||
Qy      1 GRGESP 6


RESULT   62
ID   R06455 standard; peptide; 6 AA.
AC   R06455;
DT   04-JAN-1991  (first entry)
DE   Fibronectin derived RGD-contg. peptide.
KW   Tenascin; receptor; tumour.
OS   Synthetic.
PN   WO9008781-A.
PD   09-AUG-1990.
PF   23-JAN-1990; U00408.
PR   24-JAN-1989; US-302755.
PA   (JOLL-) LA JOLLA CANCER RES.
PI   Ruoslahti EI, Bourdon MA;
DR   WPI; 90-260895/34.
PT   Tenascin-induced cell attachment - interacts with tenascin in
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PT   arginine-glycine-asparagine dependent manner.
PS   Example II; Page 9; 22pp; English.
CC   The peptide was used in cell attachment assays to show inhibition
CC   of attachment to tenascin by Arg-Gly Asp contg. peptides.  It
CC   completely inhibited attachment at a concn. of 300ug/ml, 30- and
CC   50-fold lower than needed for comparable inhibition of cell
CC   attachment to vitronectin and fibronectin resp.
SQ   Sequence   6 AA;

  Query Match           97.6%;  Score 40;  DB 2;  Length 6;
  Best Local Similarity  83.3%;  Pred. No. 9.97e+01;
  Matches     5;  Conservative    1;  Mismatches   0;  Indels   0;  Gaps   0;

Db      1 grgdsp 6
          |||:||
Qy      1 GRGESP 6


RESULT   63
ID   R71456 standard; peptide; 6 AA.
AC   R71456;
DT   20-OCT-1995  (first entry)
DE   Competitor fibronectin peptide - inhibits cytoskeleton stiffening.
KW   fibronectin; cytoskeleton; transmembrane force transfer; diagnostic;
KW   characterise cell; mechanical stimulation; ferromagnetic bead.
OS   Synthetic.
PN   WO9506248-A.
PD   02-MAR-1995.
PF   25-AUG-1994; U09685.
PR   25-AUG-1993; US-112757.
PA   (CHIL-) CHILDRENS MEDICAL CENT.
PA   (HARD ) HARVARD COLLEGE.
PI   Butler JP,  Fredberg JJ,  Ingber DE,  Wang N;
DR   WPI; 95-106940/14.
PT   System for applying mechanical loads to specific cell surface
PT   molecules  - using ferromagnetic beads coated with attachment
PT   molecules, and alignment and twisting magnetic fields, e.g. for
PT   screening therapeutic agents, toxins etc.
PS   Example 1; Page 19; 42pp; English.
CC   The system of the invention is used to determine the effect of
CC   mechanical stimulation of mols. present on a cell surface.
CC   Ferromagnetic microbeads are coated with attachment mols. eg. matrix
CC   mols., etc. that physically interconnect with distinct cytoskeletal
CC   proteins. A strong external magnetic field is applied to the beads, to
CC   impose a defined mechanical stress. Transmembrane force transfer is
CC   measured and the cells observed for changes in stiffening and twisting.
CC   To demonstrate the specificity of transmembrane force transfer in
CC   living endothelial cells, this soluble synthetic peptide was
CC   included in the culture medium as a competitior. This fibronectin
CC   peptide inhibited cytoskeletal stiffening whereas a control
CC   hexapeptide with a single amino acid substitution (R71457) had no
CC   inhibitory effects.
SQ   Sequence   6 AA;

  Query Match           97.6%;  Score 40;  DB 13;  Length 6;
  Best Local Similarity  83.3%;  Pred. No. 9.97e+01;
  Matches     5;  Conservative    1;  Mismatches   0;  Indels   0;  Gaps   0;

Db      1 grgdsp 6
          |||:||
Qy      1 GRGESP 6


RESULT   64
ID   R22969 standard; Protein; 6 AA.
AC   R22969;
DT   26-OCT-1992  (first entry)
DE   Cell adhesive peptide #3 on new CM chitin derivative side chains.
KW   CM-chitin; cell adhesion; coadhesion; wound healing; RGD peptide;
KW   immunoregulating agents; platelet coagulation; platelet adhesion.
OS   Synthetic.
PN   EP-482649-A.
PD   29-APR-1992.
PF   24-OCT-1991; 118179.
PR   26-OCT-1990; JP-289491.
PR   30-NOV-1990; JP-333718.
PR   29-MAR-1991; JP-066156.
PA   (FUJF ) FUJI PHOTO FILM CO.
PI   Kojima M, Komazawa H;
DR   WPI; 92-142753/18.
PT   New CM chitin derivs. contg. adhesive peptides - have
PT   cell-adhesive protein (ant)agonistic activity used for
PT   immuno-regulation and inhibiting blood-platelet coagulation
PS   Example; Page 5; 24pp; English.
CC   This peptide is an example of a claimed generic sequence, and is
CC   present on the sidechain of new CM-chitin derivatives. The peptide
CC   may be prepared by liquid or solid phase peptide synthesis and then
CC   coupled to CM-chitin or carboxylated CM-chitin by amide bond forming
CC   methods using eg CNBr. acid azides, or water soluble carbodiimides.
CC   The sequence contains the core sequence RGD of a cell adhesive
CC   protein and the CM-chitin derivatives contg. it will adhere to cells
CC   through the core sequence according to a mechanism similar to that
CC   for the cell adhesive protein. The derivatives act as antagonists
CC   of the cell adhesive protein and can be used as animal cell
CC   adhesion-inhibiting agents, wound healing agents, immunoregulating
CC   agents or platelet coagulation/adhesion-inhibiting agents.
CC   See also R22967-70.
SQ   Sequence   6 AA;

  Query Match           97.6%;  Score 40;  DB 4;  Length 6;
  Best Local Similarity  83.3%;  Pred. No. 9.97e+01;
  Matches     5;  Conservative    1;  Mismatches   0;  Indels   0;  Gaps   0;

Db      1 grgdsp 6
          |||:||
Qy      1 GRGESP 6


RESULT   65
ID   W03484 standard; peptide; 6 AA.
AC   W03484;
DT   24-OCT-1996  (first entry)
DE   Alpha(5)-Beta(1) integrin binding peptide 2.
KW   Synthetic; fibronectin; vitronectin; integrin; binding motif; adhesion;
KW   extracellular matrix protein; tumour metastasis.
OS   Synthetic.
PN   US5536814-A.
PD   16-JUL-1996.
PF   27-SEP-1993; 127422.
PR   27-SEP-1993; US-127422.
PR   11-MAR-1994; US-212186.
PA   (LJOL-) LA JOLLA CANCER RES FOUND.
PI   Koivunen E,  Ruoslahti E;
DR   WPI; 96-341556/34.
PT   Synthetic integrin-binding peptide(s) - useful for inhibiting tumour
PT   metastasis, etc.
PS   Example 4; Column 10; 16pp; English.
CC   Peptides W03483-508 are examples of synthetic peptides generated to bind
CC   to the fibronectin/vitronectin-binding integrin alpha(5)beta(1).  They
CC   are synthesised to contain the alpha(5)beta(1)-integrin peptide binding
CC   motifs: DGR, NGR or RGD.  The peptides interfere with the binding of
CC   fibronectin and vitronectin to this integrin and thus may be used to
CC   block integrin-mediated cell adhesion to extracellular matrix proteins,
CC   esp. to inhibit tumour metastasis.
SQ   Sequence   6 AA;

  Query Match           97.6%;  Score 40;  DB 18;  Length 6;
  Best Local Similarity  83.3%;  Pred. No. 9.97e+01;
  Matches     5;  Conservative    1;  Mismatches   0;  Indels   0;  Gaps   0;

Db      1 grgdsp 6
          |||:||
Qy      1 GRGESP 6


RESULT   66
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ID   R99889 standard; peptide; 6 AA.
AC   R99889;
DT   05-NOV-1996  (first entry)
DE   RGD-contg. synthetic peptide ligand.
KW   fibrinogen; blood clotting; GPIIb-IIIa receptor; binding; complex;
KW   epitope; exposed; monoclonal antibody.
OS   Synthetic.
PN   US5470738-A.
PD   28-NOV-1995.
PF   08-JUL-1987; 070953.
PR   08-JUL-1987; US-070953.
PR   31-MAR-1988; US-175342.
PR   05-OCT-1989; US-417565.
PR   04-OCT-1993; US-131320.
PA   (SCRI ) SCRIPPS RES INST.
PI   Frelinger AL,  Ginsberg MH,  Plow EF;
DR   WPI; 96-019874/02.
PT   Monoclonal antibodies specific for ligand-bound GPIIb-IIIa receptor
PT   - useful for detection of clotting disorders and thrombi
PS   Example 1; Column 20; 20pp; English.
CC   Monoclonal antibodies specific for a ligand-induced binding site on
CC   GPIIIa, esp. one induced in a platelet-associated GPIIb-IIIa/fibrinogen
CC   complex are claimed.  The MAb binds an epitope exposed upon binding of
CC   the ligand and receptor.  The epitope is not present on non-bound ligand
CC   or receptor.  The MAbs are useful to prevent blood clotting and in
CC   diagnostics. The present sequence is a synthetic RGD-contg. peptide
CC   ligand.
SQ   Sequence   6 AA;

  Query Match           97.6%;  Score 40;  DB 18;  Length 6;
  Best Local Similarity  83.3%;  Pred. No. 9.97e+01;
  Matches    5;  Conservative    1;  Mismatches   0;  Indels   0;  Gaps   0;

Db      1 grgdsp 6
          |||:||
Qy      1 GRGESP 6


RESULT   67
ID   R29068 standard; peptide; 6 AA.
AC   R29068;
DT   17-FEB-1993  (first entry)
DE   Peptide contg. RGD motif as a side chain to a water sol. polymer.
KW   Adhesive peptide; cell adhesion; inhibitor; platelet aggregation.
OS   Synthetic.
FH   Key             Location/Qualifiers
FT   modified_site    1
FT                    /note= "alkylated/arylated"
FT   modified_site    6
FT                    /note= "alkylated/arylated"
PN   J04221396-A.
PD   11-AUG-1992.
PF   20-DEC-1990; 404347.
PR   20-DEC-1990; JP-404347.
PA   (FUJF ) FUJI PHOTO FILM CO LTD.
DR   WPI; 92-313680/38.
PT   Water-soluble vinyl polymer deriv.- for animal cell adhesion
PT   inhibitor or platelet aggregation inhibitor
PS   Example; Page 13; 14pp; Japanese.
CC   The  peptide sequence cotains the Arg-Gly-Asp motif of cell
CC   adhering proteins.  It comprises the essential unit of a
CC   water-sol. vinyl polymer with a pref. mol. wt. of 3000-100,000 D.
CC   The polymer shows various biological actvities, e.g. immunological
CC   coordination, wound healing action and  platelet aggregation inhibiting
CC   action etc.     See also R29062-7.
SQ   Sequence   6 AA;

  Query Match           97.6%;  Score 40;  DB 5;  Length 6;
  Best Local Similarity  83.3%;  Pred. No. 9.97e+01;
  Matches    5;  Conservative    1;  Mismatches   0;  Indels   0;  Gaps   0;

Db      1 grgdsp 6
          |||:||
Qy      1 GRGESP 6


RESULT   68
ID   R94571 standard; Peptide; 6 AA.
AC   R94571;
DT   21-JUN-1996  (first entry)
DE   RGD peptide.
KW   Cytotactin; neuron; neurite; cell attachment; cell elongation;
KW   antibody.
OS   Synthetic.
PN   WO9608513-A1.
PD   21-MAR-1996.
PF   14-SEP-1995; U11684.
PR   16-SEP-1994; US-308359.
PA   (SCRI ) SCRIPPS RES INST.
PI   Crossin KL,  Phillips G,  Prieto AL;
DR   WPI; 96-179904/18.
PT   Cytotactin polypeptide(s), derivs. and antibodies - capable of
PT   stimulating neuronal cell attachment, neurite out-growth and cell
PT   elongation
PS   Example 5; Page 81; 159pp; English.
CC   RGD peptides (R94570 and R94571), inhibitors of cell attachment to
CC   type I collagen, inhibited attachment of chicken fibroblasts to
CC   cytotactin (see also R94547-48) by 73% and 70% respectively.
CC   Inhibition was total when the peptides were used together with JG22,
CC   a function-blocking monoclonal antibody against the beta-1 integrin.
CC   This suggests that there are 2 integrin binding sites on cytotactin.
SQ   Sequence   6 AA;

  Query Match           92.7%;  Score 38;  DB 16;  Length 6;
  Best Local Similarity  66.7%;  Pred. No. 1.84e+02;
  Matches    4;  Conservative    2;  Mismatches   0;  Indels   0;  Gaps   0;

Db      1 grgdtp 6
          |||::|
Qy      1 GRGESP 6


RESULT   69
ID   W84459 standard; Peptide; 6 AA.
AC   W84459;
DT   25-MAR-1999  (first entry)
DE   RGD peptide that stimulates cell invasion by S. pyogenes 90-226.
KW   Streptococcus pyogenes 90-226; pathogen; inhibition;
KW   cell adhesion; cell invasion; treatment; bacterial infection;
KW   fungal infection.
OS   Synthetic.
PN   WO9856408-A2.
PD   17-DEC-1998.
PF   10-JUN-1998; U12019.
PR   10-JUN-1997; US-049124.
PA   (MINU ) UNIV MINNESOTA.
PI   Cleary PP, Cue DR;
DR   WPI; 99-080856/07.
PT   Method for treating mammal infected by pathogenic microorganism -
PT   comprises administering to mammal composition comprising inhibitory
PT   compound which inhibits adherence to or invasion of a cell by
PT   microorganism
PS   Example 2; Page 43; 88pp; English.
CC   The present sequence represents a RGD peptide that is able to
CC   stimulate cell invasion by Streptococcus pyogenes 90-226. The
CC   peptides were used in the course of the invention. The
CC   specification describes the treatment of a mammal infected
CC   by a pathogenic microorganism which comprises administering an
CC   inhibitory compound to inhibit adherence to or invasion of cells
CC   by the pathogen. The method is used in the treatment of bacterial
CC   or fungal infection.
SQ   Sequence   6 AA;

  Query Match           92.7%;  Score 38;  DB 39;  Length 6;
  Best Local Similarity  66.7%;  Pred. No. 1.84e+02;
  Matches    4;  Conservative    2;  Mismatches   0;  Indels   0;  Gaps   0;
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Db      1 grgdtp 6
          |||::|
Qy      1 GRGESP 6
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RESULT   70
ID   R36709 standard; peptide; 6 AA.
AC   R36709;
DT   26-AUG-1993  (first entry)
DE   Adhesion formation prevention RGD-contg. peptide.
KW   Tissue repair; peritoneum; surgery; post-surgically; inhibition;
KW   platelet aggregation; cardiovascular; orthopedic; thoracic;
KW   ophthalmic; CNS; use.
OS   Synthetic.
PN   WO9308818-A.
PD   13-MAY-1993.
PF   06-NOV-1992; U09494.
PR   07-NOV-1991; US-789231.
PA   (UYSC-) UNIV SOUTHERN CALIFORNIA.
PI   Dizerega GS, Rodgers KE;
DR   WPI; 93-167381/20.
PT   Prevention of adhesion formation, partic. post-surgically - comprises
PT   administering a RGD-contg. peptide for a time sufficient to permit
PT   tissue repair
PS   Example; Page 18; 22pp; English.
CC   The sequence is that of an RGD-contg. peptide which is used in a
CC   method for prevention of adhesion formation for a time sufficient
CC   to permit tissue repair. The method is used for minimising or
CC   preventing adhesion formation, partic. in the peritoneum following
CC   surgery, but also for e.g. cardiovascular, orthopedic, thoracic,
CC   ophthalmic, CNS and other uses. In addn., the peptide inhibits
CC   platelet aggregation and does not induce inflammation or trauma
CC   at the site of administration.
SQ   Sequence   6 AA;

  Query Match           92.7%;  Score 38;  DB 7;  Length 6;
  Best Local Similarity  66.7%;  Pred. No. 1.84e+02;
  Matches    4;  Conservative    2;  Mismatches   0;  Indels   0;  Gaps   0;

Db      1 grgdtp 6
          |||::|
Qy      1 GRGESP 6
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RESULT   71
ID   R04871 standard; peptide; 6 AA.
AC   R04871;
DT   25-SEP-1989  (first entry)
DE   Peptide from fibronectin
KW   Fibronectin; cell attachment; cell detachment; fermentation; therapy.
OS   synthetic
PN   US4879237-A.
PD   07-NOV-1989.
PF   24-MAY-1985; 738078.
PR   24-MAY-1989; US-738078.
PA   (JOLL-) La Jolla Cancer Res.
PI   Ruoslahti EI, Hayman EG, Pierschbacher MD;
DR   WPI; 90-154405/20.
PT   Synthetic peptide(s) from fibronectin- used in control of cell attachment
PT   and detachment
PS   Claim 1; page 10; 13pp; English.
CC   This polypeptide mediates the attachment of animal cells to substrates.
CC   The substrate (I) is contacted with cells and with a soln. contg. this
CC   polypeptide.  This attachment can be prevented in addition to detaching
CC   the cells from (I) once attached.  Applications are in eg fermentation,
CC   cell line prepn., diagnosis and therapy.
SQ   Sequence   6 AA;

  Query Match           92.7%;  Score 38;  DB 1;  Length 6;
  Best Local Similarity  66.7%;  Pred. No. 1.84e+02;
  Matches    4;  Conservative    2;  Mismatches   0;  Indels   0;  Gaps   0;
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Db      1 grgdap 6
          |||::|
Qy      1 GRGESP 6
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RESULT   72
ID   W07430 standard; peptide; 6 AA.
AC   W07430;
DT   21-JAN-1997  (first entry)
DE   Synthetic, preferred tumour invasion-inhibitory peptide.
KW   Tumour invasion; extracellular matrix; ECM; metastasis; RGD sequence;
KW   cancer; inhibition; control.
OS   Synthetic.
PN   US5547936-A.
PD   20-AUG-1996.
PF   22-NOV-1983; 554821.
PR   22-NOV-1983; US-554821.
PR   17-JUN-1985; US-744981.
PR   10-MAR-1988; US-166530.
PR   09-SEP-1988; US-242713.
PR   25-FEB-1991; US-660526.
PR   10-APR-1991; US-683585.
PR   08-OCT-1991; US-773106.
PR   19-JUN-1992; US-902742.
PR   17-DEC-1993; US-169743.
PA   (LJOL-) LA JOLLA CANCER RES FOUND.
PI   Gehlsen KR,  Pierschbacher MD,  Ruoslahti EI;
DR   WPI; 96-392651/39.
PT   Inhibiting tumour cell invasion through an extracellular matrix -
PT   using peptide contg. the RGD sequence, partic. for preventing tumour
PT   metastasis
PS   Claim 2; Column 7-8; 8pp; English.
CC   W07430 is a preferred peptide identified in an assay for testing
CC   peptides for tumour-invasion inhibitory activity. The peptides
CC   (contg. the RGD sequence) shows significant inhibition of tumour
CC   invasion of the ECM. Other peptides tested (see W07431-W06433) did
CC   show inhibitory activity but to a lesser extent than peptide W07430
CC   The peptides identified can be used to treat cancer and to prevent
CC   metastasis, in partic. invasion of the extracellular matrix (ECM).
CC   The peptides are soluble.
SQ   Sequence   6 AA;

  Query Match           92.7%;  Score 38;  DB 19;  Length 6;
  Best Local Similarity  66.7%;  Pred. No. 1.84e+02;
  Matches    4;  Conservative    2;  Mismatches   0;  Indels   0;  Gaps   0;

Db      1 grgdtp 6
          |||::|
Qy      1 GRGESP 6
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RESULT   73
ID   R47384 standard; Protein; 6 AA.
AC   R47384;
DT   22-JUN-1994  (first entry)
DE   PH-30 beta disintegrin control peptide.
KW   PH-20; PH-30; contraceptive; fertilisation; sperm surface protein;
KW   vaccine; sperm-egg fusion.
OS   Rubella virus.
PN   WO9325233-A.
PD   23-DEC-1993.
PF   10-JUN-1993; U05640.
PR   12-JUN-1992; US-897883.
PA   (UYCO-) UNIV CONNECTICUT.
PI   Myles DG,  Primakoff P;
DR   WPI; 94-007200/01.
PT   Contraceptive vaccine for reducing sperm-egg fusion - comprises
PT   peptide from sperm surface protein which stimulates antibody
PT   prodn.
PS   Example 7; Page 27; 79pp; English.
CC   Example 7 describes the use of PH-30 beta disintegrin peptides
CC   as inhibitors of sperm fusion to egg plasma membrane.
CC   Modified peptides R47382-83 and control peptides (R47384-85)
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CC   were tested.  From observations it was concluded that the
CC   PH-30 beta disintegrin domain represents an epitope which
CC   is critical in sperm-egg fusion.
SQ   Sequence   6 AA;

  Query Match           92.7%;  Score 38;  DB 8;  Length 6;
  Best Local Similarity  66.7%;  Pred. No. 1.84e+02;
  Matches    4;  Conservative    2;  Mismatches   0;  Indels   0;  Gaps   0;

Db      1 grgdtp 6
          |||::|
Qy      1 GRGESP 6


RESULT   74
ID   R11506 standard; Protein; 6 AA.
AC   R11506;
DT   12-JUN-1991  (first entry)
DE   Cell attachment promoting peptide.
KW   Fibrin; aggregation.
OS   Synthetic.
FH   Key             Location/Qualifiers
FT   active_site     2..4
PN   US4988621-A.
PD   29-JAN-1991.
PF   10-DEC-1987; 131130.
PR   24-MAY-1985; US-738078.
PR   10-DEC-1987; US-131130.
PA   (JOLL-) LA JOLLA CANCER FOU.
PI   Ruoslahti EI, Hayman EG, Pierschbacher MD;
DR   WPI; 91-116404/16.
PT   Peptide(s) contg. arginine-glycine-aspartic acid sequence - used
PT   to prevent and reverse cell attachment or to promote cell
PT   aggregation.
PS   Disclosure; Page 8; 12pp; English.
CC   The peptide, or shorter versions contg. the RGD active site from
CC   fibronectin, can be used to prevent and reverse attachment of cells
CC   to substrates.  This can be used in cell prodn., fermentation, cell
CC   line prepn., cell matrix prodn., diagnostics and therapy.  The
CC   peptide can be used for eg mobilisation of bone marrow cells;
CC   prevention and reversal of attachment of disseminated tumour cells
CC   locally such as in the case of an operation performed in the peri-
CC   toneal cavity,  to prevent adhesions and scar formations locally as
CC   in the case of eye operations, for prophylactic inhibiton of E. coli
CC   binding to epithelial cells of the urinary tract or intestine,
CC   diagnosis and treatment of E. coli related infections, and
CC   identification of various pathogenic bacterial strains.  The
CC   peptide is pref. prepd. by solid phase synthesis.
CC   See also R11505
SQ   Sequence   6 AA;

  Query Match           92.7%;  Score 38;  DB 2;  Length 6;
  Best Local Similarity  66.7%;  Pred. No. 1.84e+02;
  Matches    4;  Conservative    2;  Mismatches   0;  Indels   0;  Gaps   0;

Db      1 grgdap 6
          |||::|
Qy      1 GRGESP 6


RESULT   75
ID   R36711 standard; peptide; 6 AA.
AC   R36711;
DT   26-AUG-1993  (first entry)
DE   Adhesion formation prevention RGD-contg. peptide.
KW   Tissue repair; peritoneum; surgery; post-surgically; inhibition;
KW   platelet aggregation; cardiovascular; orthopedic; thoracic;
KW   ophthalmic; CNS; use.
OS   Synthetic.
PN   WO9308818-A.
PD   13-MAY-1993.
PF   06-NOV-1992; U09494.
PR   07-NOV-1991; US-789231.
PA   (UYSC-) UNIV SOUTHERN CALIFORNIA.
PI   Dizerega GS, Rodgers KE;
DR   WPI; 93-167381/20.
PT   Prevention of adhesion formation, partic. post-surgically - comprises
PT   administering a RGD-contg. peptide for a time sufficient to permit
PT   tissue repair
PS   Example; Page 18; 22pp; English.
CC   The sequence is that of an RGD-contg. peptide which is used in a
CC   method for prevention of adhesion formation for a time sufficient
CC   to permit tissue repair. The method is used for minimising or
CC   preventing adhesion formation, partic. in the peritoneum following
CC   surgery, but also for e.g. cardiovascular, orthopedic, thoracic,
CC   ophthalmic, CNS and other uses. In addn., the peptide inhibits
CC   platelet aggregation and does not induce inflammation or trauma
CC   at the site of administration.
SQ   Sequence   6 AA;

  Query Match           90.2%;  Score 37;  DB 7;  Length 6;
  Best Local Similarity  66.7%;  Pred. No. 2.48e+02;
  Matches    4;  Conservative    2;  Mismatches   0;  Indels   0;  Gaps   0;

Db      1 grgdnp 6
          |||::|
Qy      1 GRGESP 6


RESULT   76
ID   W07432 standard; peptide; 6 AA.
AC   W07432;
DT   21-JAN-1997  (first entry)
DE   Synthetic, weak, tumour invasion-inhibitory peptide.
KW   Tumour invasion; extracellular matrix; ECM; metastasis; RGD sequence;
KW   cancer; inhibition; control.
OS   Synthetic.
PN   US5547936-A.
PD   20-AUG-1996.
PF   22-NOV-1983; 554821.
PR   22-NOV-1983; US-554821.
PR   17-JUN-1985; US-744981.
PR   10-MAR-1988; US-166530.
PR   09-SEP-1988; US-242713.
PR   25-FEB-1991; US-660526.
PR   10-APR-1991; US-683585.
PR   08-OCT-1991; US-773106.
PR   19-JUN-1992; US-902742.
PR   17-DEC-1993; US-169743.
PA   (LJOL-) LA JOLLA CANCER RES FOUND.
PI   Gehlsen KR,  Pierschbacher MD,  Ruoslahti EI;
DR   WPI; 96-392651/39.
PT   Inhibiting tumour cell invasion through an extracellular matrix -
PT   using peptide contg. the RGD sequence, partic. for preventing tumour
PT   metastasis
PS   Example 1; Column 7-8; 8pp; English.
CC   W07431-W07433 are peptides identified in an assay for tumour-invasion
CC   inhibitory activity. The peptides (contg. the RGD sequence) show a
CC   weak inhibition of tumour invasion of the ECM. Another peptide tested
CC   (see W07430) showed a significant inhibitory activity. The peptides
CC   identified can be used to treat cancer and to prevent metastasis, in
CC   partic. invasion of the extracellular matrix (ECM).
CC   The peptides are soluble.
SQ   Sequence   6 AA;

  Query Match           90.2%;  Score 37;  DB 19;  Length 6;
  Best Local Similarity  66.7%;  Pred. No. 2.48e+02;
  Matches    4;  Conservative    2;  Mismatches   0;  Indels   0;  Gaps   0;

Db      1 grgdnp 6
          |||::|
Qy      1 GRGESP 6


RESULT   77
ID   W25181 standard; peptide; 6 AA.
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AC   W25181;
DT   05-JAN-1998  (first entry)
DE   RGD-peptide capable of binding cell adhesion molecules.
KW   RGD; arginine; glycine; aspartic acid; cell adhesion molecule;
KW   binding; bladder irrigation; tumour removal; endoscopic operation;
KW   transurethral resection; cancer; neoplasia.
OS   Synthetic.
PN   DE19529909-A1.
PD   20-FEB-1997.
PF   15-AUG-1995; 029909.
PR   15-AUG-1995; DE-029909.
PA   (FREP ) FRESENIUS AG.
PI   Boehle A;
DR   WPI; 97-133793/13.
PT   Endoscopic irrigation solns. - contg. peptide(s) that bind to cell
PT   adhesion molecules
PS   Claim 5; Page 8; 8pp; German.
CC   W25173-W25186 are peptides containing an RGD sequence or equivalent.
CC   The peptides are capable of binding to cell adhesion molecules and
CC   are used in aqueous irrigation solutions for use during and after
CC   endoscopic operations. Preferred irrigation solutions are
CC   electrolyte-free and contain 1 microg/ml to 100 mg/ml of one or more
CC   oligopeptides containing the amino acid sequences: RGD, LDV, IDA, DGEA,
CC   GPRP, VTL, YIGSR, KQAGDV and/or REDV (given in one letter amino acid
CC   code). The solutions are especially used for irrigating the bladder
CC   during and after tumour removal by transurethral resection. The
CC   peptides protect against recurrence of tumours.
SQ   Sequence   6 AA;

  Query Match           90.2%;  Score 37;  DB 24;  Length 6;
  Best Local Similarity  66.7%;  Pred. No. 2.48e+02;
  Matches     4;  Conservative    2;  Mismatches   0;  Indels   0;  Gaps   0;

Db      1 grgdnp 6
          |||::|
Qy      1 GRGESP 6


RESULT   78
ID   W43308 standard; peptide; 5 AA.
AC   W43308;
DT   03-APR-1998  (first entry)
DE   Control peptide.
KW   Osteopontin; inflammation; nitric oxide; gamma-interferon; gamma-IFN;
KW   lipopolysaccharide; ischaemia; septic shock; lipopolysaccharide.
OS   Synthetic.
PN   US5695761-A.
PD   09-DEC-1997.
PF   23-DEC-1993; 173116.
PR   23-DEC-1993; US-173116.
PA   (UYNE-) UNIV NEW JERSEY MEDICINE & DENTISTRY.
PA   (RUTF ) UNIV RUTGERS STATE.
PI   Denhardt DT, Heck DE, Hwang S, Laskin DL, Laskin JD,
PI   Lopez CA;
DR   WPI; 98-041235/04.
PT   Treatment of inflammatory disorders mediated by nitric oxide - with
PT   osteopontin protein or peptide(s)
PS   Example 1; Column 19; 22pp; English.
CC   The invention relates to a 20 amino acid fragment of osteopontin
CC   that contains an epitope GRGDS and suppresses expression of inducible
CC   nitric oxide synthase mRNA. A 100-fold molar excess of the peptide
CC   GRGDS, but not the present control peptide GRGES, was able to reverse
CC   osteopontin-mediated supression of gamma-interferon-iduced nitric oxide
CC   production. The molecule of the invention is useful for treating an
CC   inflammatory disease or disorder associated with nitric oxide activity
CC   and/or gamma-interferon (gamma-IFN) or lipopolysaccharide, especially
CC   ischaemia, septic shock and cell-mediated immune response, located in
CC   the inner ear or kidney.
SQ   Sequence   5 AA;

  Query Match           80.5%;  Score 33;  DB 27;  Length 5;
  Best Local Similarity 100.0%;  Pred. No. 8.05e+02;
  Matches     5;  Conservative    0;  Mismatches   0;  Indels   0;  Gaps   0;

Db      1 grges 5
          |||||
Qy      1 GRGES 5


RESULT   79
ID   R04611 standard; protein; 5 AA.
AC   R04611;
DT   05-SEP-1990  (first entry)
DE   Antiviral agent.
KW   Antiviral; M2; poliovirus; polio; heatitis.
OS   Synthetic.
PN   J02078631-A.
PD   19-MAR-1990.
PF   14-SEP-1988; 228843.
PR   14-SEP-1988; JP-228843.
PA   (NIHA) Nippon Mining KK.
DR   WPI; 90-129060/17.
PT   Antiviral agent contg. tri:peptide (unit) -
PT   of basic aminoacid, then alanine, glycine or sarcosine, and
PT   acidic aminoacid, effective against virus with protein-terminated DNA
PT   or RNA.
PS   Disclosure; 4pp; Japanese.
CC   Peptide is effective against inhibiting propogation of DNA or RNA
CC   bonded, protein containing viruses eg. Poliovirus, Hepatitis virus.
SQ   Sequence   5 AA;

  Query Match           80.5%;  Score 33;  DB 1;  Length 5;
  Best Local Similarity 100.0%;  Pred. No. 8.05e+02;
  Matches     5;  Conservative    0;  Mismatches   0;  Indels   0;  Gaps   0;

Db      1 grges 5
          |||||
Qy      1 GRGES 5


RESULT   80
ID   R47385 standard; Protein; 5 AA.
AC   R47385;
DT   22-JUN-1994  (first entry)
DE   PH-30 beta disintegrin control peptide.
KW   PH-20; PH-30; contraceptive; fertilisation; sperm surface protein;
KW   vaccine; sperm-egg fusion.
OS   Rubella virus.
PN   WO9325233-A.
PD   23-DEC-1993.
PF   10-JUN-1993; U05640.
PR   12-JUN-1992; US-897883.
PA   (UYCO-) UNIV CONNECTICUT.
PI   Myles DG,  Primakoff P;
DR   WPI; 94-007200/01.
PT   Contraceptive vaccine for reducing sperm-egg fusion - comprises
PT   peptide from sperm surface protein which stimulates antibody
PT   prodn.
PS   Example 7; Page 27; 79pp; English.
CC   Example 7 describes the use of PH-30 beta disintegrin peptides
CC   as inhibitors of sperm fusion to egg plasma membrane.
CC   Modified peptides R47382-83 and control peptides (R47384-85)
CC   were tested.  From observations it was concluded that the
CC   PH-30 beta disintegrin domain represents an epitope which
CC   is critical in sperm-egg fusion.
SQ   Sequence   5 AA;

  Query Match           80.5%;  Score 33;  DB 8;  Length 5;
  Best Local Similarity 100.0%;  Pred. No. 8.05e+02;
  Matches     5;  Conservative    0;  Mismatches   0;  Indels   0;  Gaps   0;

Db      1 grges 5
          |||||
Qy      1 GRGES 5
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RESULT   81
ID   R70655 standard; peptide; 5 AA.
AC   R70655;
DT   26-JUN-1995  (first entry)
DE   Synthetic RGD peptide inhibits intercellular adhesion by fibronectin.
KW   RGD peptide; competitor; fibronectin; inhibition; RGD-lipid derivative;
KW   intercellular adhesion; suppress transfer of cancer cell; liposome.
OS   Synthetic.
FH   Key             Location/Qualifiers
FT   modified_site   1
FT                   /note= "H-Arg"
FT   modified_site   5..5
FT                   /note= "Pro-NH-(CH2CH2O)3-n-C18H37-2HCl"
PN   J06219967-A.
PD   09-AUG-1994.
PF   22-JAN-1993; 009290.
PR   22-JAN-1993; JP-009290.
PA   (DDSK-) DDS KENKYUSHO KK.
DR   WPI; 94-312661/39.
PT   New peptide-lipid derivs. bound directly or via linker to lipid -
PT   useful for inhibiting mouse lung cancer cell line, 3LL cell
PT   adhesion by fibronectin
PS   Example; Page 4; 12pp; Japanese.
CC   R70651-56 are RGD contg. peptides that can bind to cancer cells. The
CC   exogenous peptides compete with fibronectin and inhibit
CC   intercellular adhesion by fibronectin. The peptides are bound
CC   directly or via a linker to a lipid. A liposome suspension contg.
CC   RGD peptide was found to effectively suppress 3LL cell adhesion by
CC   fibronectin, in the mouse lung cancer cell line.
SQ   Sequence   5 AA;

  Query Match           80.5%;  Score 33;  DB 12;  Length 5;
  Best Local Similarity  80.0%;  Pred. No. 8.05e+02;
  Matches    4;  Conservative    1;  Mismatches   0;  Indels   0;  Gaps   0;

Db      1 rgdsp 5
          ||:||
Qy      2 RGESP 6


RESULT   82
ID   R26813 standard; peptide; 5 AA.
AC   R26813;
DT   18-FEB-1993  (first entry)
DE   Polyethylene glycol derivative #4.
KW   triazine ring; methoxy-polyethyleneoxy group; fibronectin; vibronectin;
KW   platelet adhesion; metastasis; neuropathy.
OS   Synthetic.
PN   J04217693-A.
PD   07-AUG-1992.
PF   30-NOV-1990; 333717.
PR   23-OCT-1990; JP-285172.
PA   (FUJF ) FUJI PHOTO FILM CO LTD.
DR   WPI; 92-312284/38.
PT   Polyethylene glycol derivs. contg. peptide(s) - inhibit cellular
PT   adhesion for fibronectin or vitronectin and are used to inhibit
PT   agglutination or adhesion of platelets
PS   Disclosure; Page 4; 9pp; Japanese.
CC   The sequences given in R26810-14 are examples of a peptide chain
CC   which is attached once or twice to a triazine ring which is also
CC   substituted twice or once, respectively, with a methoxy-polyethyleneoxy
CC   group.  These peptides can be used to inhibit cellular adhesion to
CC   fibronectin or vitronectin and they are useful as inhibitors for
CC   agglutination or adhesion of platelets.  They can also be useful as
CC   inhibitors for metastsis of cancers, inhibitors of agglutination of
CC   platelets caused by tumour cells in the blood capillaries, and drugs
CC   acting on neuropathy.
SQ   Sequence   5 AA;

  Query Match           80.5%;  Score 33;  DB 5;  Length 5;
  Best Local Similarity  80.0%;  Pred. No. 8.05e+02;
  Matches    4;  Conservative    1;  Mismatches   0;  Indels   0;  Gaps   0;

Db      1 rgdsp 5
          ||:||
Qy      2 RGESP 6


RESULT   83
ID   R70474 standard; peptide; 5 AA.
AC   R70474;
DT   20-DEC-1995  (first entry)
DE   Cancer metastasis inhibitory RGD peptide derivative #2.
KW   Cancer metastasis; adhesive peptide; core sequence; dextran; cancer;
KW   water soluble polysaccharide; metastasis; wound; immunogenicity.
OS   Synthetic.
PN   J07089999-A.
PD   04-APR-1995.
PF   17-SEP-1993; 254779.
PR   17-SEP-1993; JP-254779.
PA   (JAPG ) NIPPON ZEON KK.
DR   WPI; 95-167254/22.
PT   Cancer metastasis inhibitive peptide derivs. - useful for inhibition
PT   of cancer metastasis, healing of wounds and regulation of
PT   immunogenicity.
PS   Disclosure; Page 2; 6pp; Japanese.
CC   The peptides R70472-90 and R82907-24 are peptide derivatives which
CC   inhibit cancer metastasis.  They are composed of an adhesive peptide with
CC   a core sequence selected from: RGD (R70472-85), YIGSR (R70486-90) or
CC   other sequence (R82907-24), linked to a water soluble polysaccharide,
CC   preferably a water soluble dextran, at the C-terminus.  The peptides are
CC   useful in inhibiting cancer metastasis, healing wounds and the regulation
CC   of immunogenicity.
SQ   Sequence   5 AA;

  Query Match           80.5%;  Score 33;  DB 14;  Length 5;
  Best Local Similarity  80.0%;  Pred. No. 8.05e+02;
  Matches    4;  Conservative    1;  Mismatches   0;  Indels   0;  Gaps   0;

Db      1 rgdsp 5
          ||:||
Qy      2 RGESP 6


RESULT   84
ID   R25319 standard; peptide; 6 AA.
AC   R25319;
DT   17-MAR-1993  (first entry)
DE   Cell contact inhibitor generic peptide #8.
KW   Cyclic peptide; cell contact inhibitor; hydrolytic enzyme.
OS   Synthetic.
FH   Key             Location/Qualifiers
FT   modified_site   2
FT                   /label= MeGly
PN   J04264097-A.
PD   18-SEP-1992.
PF   16-FEB-1991; 044386.
PR   16-FEB-1991; JP-044386.
PA   (ASAG ) ASAHI GLASS CO LTD.
DR   WPI; 92-361922/44.
PT   Peptide derivs. as contact inhibitor for animal cells - comprise
PT   synthesised cyclic peptide and have portion of aminoacid sequence
PT   of arginine-N-methyl:glycine-aspartic acid
PS   Disclosure; Page 3; 6pp; Japanese.
CC   The sequences given in R25311-19 are cyclic peptides which act as
CC   contact inhibitors of animal cells.  They are resistant to
CC   decomposition by hydrolytic enzymes and can be maintained at high
CC   levels of activity for a long period in vivo.  The peptides are
CC   cyclic and may have 1-16 pref. 1-4 amino acids.
SQ   Sequence   6 AA;

  Query Match           80.5%;  Score 33;  DB 5;  Length 6;
  Best Local Similarity  80.0%;  Pred. No. 8.05e+02;
  Matches    4;  Conservative    1;  Mismatches   0;  Indels   0;  Gaps   0;

Db      1 rgdsp 5
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          ||:||
Qy      2 RGESP 6


RESULT   85
ID   W48518 standard; peptide; 6 AA.
AC   W48518;
DT   18-AUG-1998  (first entry)
DE   Integrin receptor antagonist peptide 57.
KW   Integrin receptor antagonist; cell adhesion modulator; leukocyte;
KW   extracellular matrix; fibronectin; ARDS; thrombosis; inflammation.
OS   Synthetic.
FH   Key             Location/Qualifiers
FT   Modified_site   1..6
FT                   /note= "Amide linkage between alpha amino group of
FT                          Arg and side chain carboxyl group of Glu"
FT   Modified_site   6
FT                   /note= "C-terminal amide"
PN   US5721210-A.
PD   24-FEB-1998.
PF   07-JUN-1995; 485019.
PR   04-JUN-1993; US-961889.
PR   09-JUL-1990; US-550330.
PR   09-JUL-1991; WO-U04862.
PR   07-JUN-1995; US-485019.
PA   (TANA ) TANABE SEIYAKU CO.
PI   Cardarelli PM, Chiang S, Lobl TJ;
DR   WPI; 98-168442/15.
PT   New cyclic peptide(s) and peptidomimetic compounds - are integrin
PT   receptor antagonists useful in modulating cell adhesion.
PS   Example 9; Column 42; 32pp; English.
CC   The present sequence represents a synthetic peptide which
CC   acts as an antagonist to integrin receptors.  The invention provides
CC   various synthetic peptides which act as cell adhesion modulators because
CC   they mimic extra-cellular matrix ligands or other cell adhesion ligands
CC   that bind to receptors such as integrin receptors, including fibronectin,
CC   laminin, LFA-1, MAC-1, p150,95, vitronectin and gpIIb/IIIa receptors.
CC   Some of the peptides contain the amino acid sequence Arg-Gly-Asp (RGD).
CC   Others contain non-RGD sequences, for e.g RCD sequences, and reverse
CC   orientation forms of amino acid residues.  The synthetic peptides
CC   are useful in modulating cell adhesion, including adhesion related to
CC   fibronectin, as well as leukocyte adhesion to endothelial cells.  They
CC   are also claimed to be useful in the study, diagnosis, treatment or
CC   prevention of diseases which relate to cell adhesion, e.g. adult
CC   respiratory distress syndrome (ARDS), thrombosis and inflammatory
CC   conditions.
SQ   Sequence   6 AA;

  Query Match           80.5%;  Score 33;  DB 31;  Length 6;
  Best Local Similarity  80.0%;  Pred. No. 8.05e+02;
  Matches    4;  Conservative    1;  Mismatches   0;  Indels   0;  Gaps   0;

Db      1 rgdsp 5
          ||:||
Qy      2 RGESP 6


RESULT   86
ID   R29075 standard; peptide; 6 AA.
AC   R29075;
DT   17-FEB-1993  (first entry)
DE   Gelatin deriv. peptide contg. RGD motif.
KW   Adhesive peptide; cell adhesion; inhibitor; platelet aggregation.
OS   Synthetic.
FH   Key             Location/Qualifiers
FT   modified_site   1
FT                   /note= "alkylated/arylated"
FT   modified_site   6
FT                   /note= "alkylated/arylated"
PN   J04221400-A.
PD   11-AUG-1992.
PF   30-NOV-1990; 333719.
PR   26-OCT-1990; JP-289492.
PA   (FUJF ) FUJI PHOTO FILM CO LTD.
DR   WPI; 92-313683/38.
PT   Gelatin deriv. with adhesive peptide side chain - used for animal
PT   cell adhesion inhibitor and platelet aggregation-adhesion inhibitor
PS   Example; Page 13; 10pp; Japanese.
CC   The gelatin deriv. contains the Arg-Gly-Asp motif of cell adhering
CC   proteins.  It comprises the essential unit of a water-sol. vinyl
CC   polymer with a pref. mol. wt. of 3000-100,000 D. The polymer shows
CC   various biological actvities, e.g. immunological coordination, wound
CC   healing action and  platelet aggregation inhibiting action etc.
CC   See also R29069-74.
SQ   Sequence   6 AA;

  Query Match           80.5%;  Score 33;  DB 5;  Length 6;
  Best Local Similarity  80.0%;  Pred. No. 8.05e+02;
  Matches    4;  Conservative    1;  Mismatches   0;  Indels   0;  Gaps   0;

Db      2 rgdsp 6
          ||:||
Qy      2 RGESP 6


RESULT   87
ID   W68568 standard; peptide; 6 AA.
AC   W68568;
DT   25-JAN-1999  (first entry)
DE   Conformationally constrained RGD peptide #5.
KW   Cell adhesion motif; RGD motif; affinity; receptor; stereochemistry;
KW   conformation; cyclisation; medical devise; prosthesis; implant;
KW   cell attachment.
OS   Synthetic.
PN   US5827821-A.
PD   27-OCT-1998.
PF   16-JUL-1992; 914643.
PR   29-DEC-1988; US-292517.
PR   10-DEC-1987; US-131390.
PR   15-OCT-1991; US-776839.
PR   16-JUL-1992; US-914643.
PA   (BURN-) BURNHAM INST.
PI   Pierschbacher MD, Ruoslahti EI;
DR   WPI; 98-594031/50.
PT   New synthetic peptides - used for in vivo applications such as
PT   coating of medical devices, including prosthesis and implants, to
PT   aid the attachment of cells
PS   Disclosure; Column 5; 11pp; English.
CC   This is an example of a novel type of peptide containing the cell
CC   adhesion motif Arg-Gly-Asp (RGD) of formula: X-R1-R2-Arg-Gly-Asp-R3-R4-Y,
CC   where R2 = 0-5 amino acids; R3 = 0-5 amino acids; R1, R4 = amino acids
CC   connected by a bridge; X = H or one or more amino acids; and Y = OH, NH2
CC   or one or more amino acids. Preferably the novel peptides have 5-30 amino
CC   acid residues.  The peptides have high affinity and specificity for their
CC   receptors by virtue of restrictions on their stereochemical conformation,
CC   restrictions which are provided by cyclisation. The peptides have various
CC   applications relating to their cell-adhesion properties e.g. as coatings
CC   of medical devices, including prosthesis and implants, to aid the
CC   attachment of cells.  The peptides also have in vitro uses in coating of
CC   substrates, such as cell culture substrates, to promote cell adhesion.
SQ   Sequence   6 AA;

  Query Match           80.5%;  Score 33;  DB 37;  Length 6;
  Best Local Similarity  80.0%;  Pred. No. 8.05e+02;
  Matches    4;  Conservative    1;  Mismatches   0;  Indels   0;  Gaps   0;

Db      2 rgdsp 6
          ||:||
Qy      2 RGESP 6


RESULT   88
ID   W66827 standard; peptide; 6 AA.
AC   W66827;
DT   10-DEC-1998  (first entry)
DE   Peptide useful for altering bone resorption.
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KW   bone resorption; pharmacore; angiogenesis; restenosis; integrin receptor;
KW   alpha v beta 3 integrin receptor; osteoclast; cyclic.
OS   Synthetic.
FH   Key             Location/Qualifiers
FT   Modified_site   6
FT                   /note= "C-terminal amide"
PN   US5807819-A.
PD   15-SEP-1998.
PF   12-APR-1995; 421698.
PR   12-APR-1995; US-421698.
PR   15-APR-1994; US-227316.
PR   08-SEP-1994; US-303052.
PA   (LJOL-) LA JOLLA CANCER RES CENT.
PI   Cheng S, Ingram R, Mullen D, Tschopp JF;
DR   WPI; 98-555601/47.
PT   Use of peptide derivatives which can alter integrin receptor binding
PT   - for altering bone resorption, treating angiogenesis or restenosis
PT   and altering integrin receptor mediated interactions
PS   Example 2; Figure 2B; 87pp; English.
CC   A new method is claimed for altering bone resorption. It comprises
CC   administration of a peptide of formula: X1X2X3X4GDX5X6X7X8; where X1 =
CC   R1R2N or 0-10 amino acids (optionally protected by acetylation at the N-
CC   terminus); X2 = absent or 1 amino acid; X3 = absent or 1 or 2 amino
CC   acids; X4 = N-Me-Arg; X5 = residue which provides an ionic interaction
CC   with an integrin receptor, or is Msa, Psa or Tfsa; X6 = residue which
CC   has an aliphatic side chain; a non-natural amino acid that is
CC   hydrophobic; or Thr; X7 = a residue capable of forming a bond (i) with a
CC   bridging amino acid of X2, (ii) with X3 when X2 is absent, or (iii) with
CC   X4 when X2 and X3 are absent, to conformationally restrain the peptide;
CC   X8 = NR3R4; OR5; or 0-10 amino acids, optionally protected as an amide at
CC   the C- terminus; R1, R3-R5 = H or alkyl; R2 = H, alkyl, alkyl-CO or
CC   phenyl-CO. The peptides are useful for inhibiting bone resorption,
CC   angiogenesis or restenosis, and for altering integrin receptor-mediated
CC   interactions, especially alpha v beta 3 integrin receptor-mediated
CC   binding of cells to a matrix. They may be used for reducing or inhibiting
CC   osteoclast binding to a matrix. The present sequence represents an
CC   example of a circular peptide disclosed in the specification.
SQ   Sequence   6 AA;

  Query Match           80.5%;  Score 33;  DB 36;  Length 6;
  Best Local Similarity  80.0%;  Pred. No. 8.05e+02;
  Matches    4;  Conservative    1;  Mismatches   0;  Indels   0;  Gaps   0;

Db      1 rgdsp 5
          ||:||
Qy      2 RGESP 6


RESULT   89
ID   W48577 standard; peptide; 6 AA.
AC   W48577;
DT   18-AUG-1998  (first entry)
DE   Integrin receptor antagonist peptide 116.
KW   Integrin receptor antagonist; cell adhesion modulator; leukocyte;
KW   extracellular matrix; fibronectin; ARDS; thrombosis; inflammation.
OS   Synthetic.
FH   Key             Location/Qualifiers
FT   Modified_site   1..6
FT                   /note= "Amide linkage between the alpha amino group
FT                        of Arg and the side chain carboxyl group of Asp"
FT   Modified_site   6
FT                   /note= "C-terminal amide"
PN   US5721210-A.
PD   24-FEB-1998.
PF   07-JUN-1995; 485019.
PR   04-JUN-1993; US-961889.
PR   09-JUL-1990; US-550330.
PR   09-JUL-1991; WO-U04862.
PR   07-JUN-1995; US-485019.
PA   (TANA ) TANABE SEIYAKU CO.
PI   Cardarelli PM, Chiang S, Lobl TJ;
DR   WPI; 98-168442/15.
PT   New cyclic peptide(s) and peptidomimetic compounds - are integrin
PT   receptor antagonists useful in modulating cell adhesion.
PS   Example 9; Column 44; 32pp; English.
CC   The present sequence represents a synthetic peptide which
CC   acts as an antagonist to integrin receptors. The invention provides
CC   various synthetic peptides which act as cell adhesion modulators because
CC   they mimic extra-cellular matrix ligands or other cell adhesion ligands
CC   that bind to receptors such as integrin receptors, including fibronectin,
CC   laminin, LFA-1, MAC-1, p150,95, vitronectin and gpIIb/IIIa receptors.
CC   Some of the peptides contain the amino acid sequence Arg-Gly-Asp (RGD).
CC   Others contain non-RGD sequences, for e.g RCD sequences, and reverse
CC   orientation forms of amino acid residues. The synthetic peptides
CC   are useful in modulating cell adhesion, including adhesion related to
CC   fibronectin, as well as leukocyte adhesion to endothelial cells. They
CC   are also claimed to be useful in the study, diagnosis, treatment or
CC   prevention of diseases which relate to cell adhesion, e.g. adult
CC   respiratory distress syndrome (ARDS), thrombosis and inflammatory
CC   conditions.
SQ   Sequence   6 AA;

  Query Match           80.5%;  Score 33;  DB 31;  Length 6;
  Best Local Similarity  80.0%;  Pred. No. 8.05e+02;
  Matches    4;  Conservative    1;  Mismatches   0;  Indels   0;  Gaps   0;

Db      1 rgdsp 5
          ||:||
Qy      2 RGESP 6


RESULT   90
ID   R96371 standard; peptide; 6 AA.
AC   R96371;
DT   05-JUL-1996  (first entry)
DE   RGD cyclic peptide, TL#825, binds alpha-v,beta3 integrin receptor.
KW   RGD-containing peptide; alpha-v, beta-3 integrin receptor; osteoclast;
KW   matrix; bone; inhibition; bone resorption; promote; endothelial cell;
KW   smooth muscle cell; restenosis; angiogenesis; cyclic.
OS   Synthetic.
FH   Key             Location/Qualifiers
FT   modified_site   1
FT                   /note= "forms lactam bridge with Glu(6)"
FT   modified_site   6
FT                   /note= "forms lactam bridge with Arg(1), amidated
FT                   C-terminal"
PN   WO9528426-A2.
PD   26-OCT-1995.
PF   12-APR-1995; U04741.
PR   13-APR-1994; US-227316.
PR   08-SEP-1994; US-303052.
PA   (LJOL-) LA JOLLA CANCER RES FOUND.
PI   Cheng S,  Ingram R,  Mullen D,  Tschopp J;
DR   WPI; 95-373767/48.
PT   Altering alpha-v, beta-3 integrin receptor-mediated binding of cell
PT   to matrix - using conformationally restrained peptide of RGD type,
PT   e.g. for treating inappropriate angiogenesis or for inhibiting bone
PT   resorption
PS   Claim 85; Page 79; 99pp; English.
CC   The sequences given in R96301-417 are non-naturally occurring RGD-
CC   containing peptides which alter the alpha-v, beta-3 integrin receptor
CC   binding of a cell to a matrix, such as the binding of an osteoclast to
CC   a matrix such as bone. These peptides inhibit bone resorption and can
CC   inhibit or promote alpha-v, beta-3-mediated cell attachment depending
CC   on whether they are present in the cell in a soluble form or are bound
CC   to a solid substrate. These peptides can be used in the amelioration
CC   of the severity of a pathology involving alpha-v, beta-3 receptor-
CC   mediated binding of a cell, such as an osteoclast, endothelial cell or
CC   smooth muscle cell to a matrix. They are used for treating conditions
CC   associated with restenosis or inappropriate or insufficient angiogenesis,
CC   or for inhibiting osteoclast binding to the matrix.
SQ   Sequence   6 AA;

  Query Match           80.5%;  Score 33;  DB 16;  Length 6;
  Best Local Similarity  80.0%;  Pred. No. 8.05e+02;
  Matches    4;  Conservative    1;  Mismatches   0;  Indels   0;  Gaps   0;
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Db      1 rgdsp 5
          ||:||
Qy      2 RGESP 6


RESULT   91
ID   R70475 standard; peptide; 6 AA.
AC   R70475;
DT   20-DEC-1995  (first entry)
DE   Cancer metastasis inhibitory RGD peptide derivative #3.
KW   Cancer metastasis; adhesive peptide; core sequence; dextran; cancer;
KW   water soluble polysaccharide; metastasis; wound; immunogenicity.
OS   Synthetic.
PN   J07089999-A.
PD   04-APR-1995.
PF   17-SEP-1993; 254779.
PR   17-SEP-1993; JP-254779.
PA   (JAPG ) NIPPON ZEON KK.
DR   WPI; 95-167254/22.
PT   Cancer metastasis inhibitive peptide derivs. - useful for inhibition
PT   of cancer metastasis, healing of wounds and regulation of
PT   immunogenicity.
PS   Disclosure; Page 2; 6pp; Japanese.
CC   The peptides R70472-90 and R82907-24 are peptide derivatives which
CC   inhibit cancer metastasis.  They are composed of an adhesive peptide with
CC   a core sequence selected from: RGD (R70472-85), YIGSR (R70486-90) or
CC   other sequence (R82907-24), linked to a water soluble polysaccharide,
CC   preferably a water soluble dextran, at the C-terminus.  The peptides are
CC   useful in inhibiting cancer metastasis, healing wounds and the regulation
CC   of immunogenicity.
SQ   Sequence   6 AA;

  Query Match           80.5%;  Score 33;  DB 14;  Length 6;
  Best Local Similarity  80.0%;  Pred. No. 8.05e+02;
  Matches    4;  Conservative    1;  Mismatches   0;  Indels   0;  Gaps   0;

Db      1 rgdsp 5
          ||:||
Qy      2 RGESP 6


RESULT   92
ID   R34451 standard; peptide; 5 AA.
AC   R34451;
DT   02-AUG-1993  (first entry)
DE   Fibronectin-like binding motif.
KW   Immunoglobulin D; oligosaccharide; N-glycosylation;
KW   IgD antigen receptor complex; delta chain constant region.
OS   Homo sapiens.
FH   Key             Location/Qualifiers
FT   binding_site     2..4
FT                    /note= "fibrinogen binding motif"
PN   WO9307291-A.
PD   15-APR-1993.
PF   09-OCT-1992; U08724.
PR   11-OCT-1991; US-773328.
PA   (UYNY ) UNIV NEW YORK STATE.
PI   Amin AR,  Oppenheim JD,  Thorbecke GJ;
DR   WPI; 93-134476/16.
PT   Use of immunoglobulin D-associated glycan cpds. - for inhibiting
PT   immune response, treating immune-mediated disease and enhancing
PT   immune response
PS   Disclosure; Page 53; 77pp; English.
CC   This pentapeptide sequence comprises the RGD motif typical of cell
CC   adhesion molecules, including fibronectin.
SQ   Sequence   5 AA;

  Query Match           78.0%;  Score 32;  DB 7;  Length 5;
  Best Local Similarity  80.0%;  Pred. No. 1.07e+03;
  Matches    4;  Conservative    1;  Mismatches   0;  Indels   0;  Gaps   0;

Db      1 grgds 5
          |||:|
Qy      1 GRGES 5


RESULT   93
ID   R36714 standard; peptide; 5 AA.
AC   R36714;
DT   26-AUG-1993  (first entry)
DE   Adhesion formation prevention RGD-contg. peptide.
KW   Tissue repair; peritoneum; surgery; post-surgically; inhibition;
KW   platelet aggregation; cardiovascular; orthopedic; thoracic;
KW   ophthalmic; CNS; use.
OS   Synthetic.
PN   WO9308818-A.
PD   13-MAY-1993.
PF   06-NOV-1992; U09494.
PR   07-NOV-1991; US-789231.
PA   (UYSC-) UNIV SOUTHERN CALIFORNIA.
PI   Dizerega GS, Rodgers KE;
DR   WPI; 93-167381/20.
PT   Prevention of adhesion formation, partic. post-surgically - comprises
PT   administering a RGD-contg. peptide for a time sufficient to permit
PT   tissue repair
PS   Example; Page 18; 22pp; English.
CC   The sequence is that of an RGD-contg. peptide which is used in a
CC   method for prevention of adhesion formation for a time sufficient
CC   to permit tissue repair. The method is used for minimising or
CC   preventing adhesion formation, partic. in the peritoneum following
CC   surgery, but also for e.g. cardiovascular, orthopedic, thoracic,
CC   ophthalmic, CNS and other uses. In addn., the peptide inhibits
CC   platelet aggregation and does not induce inflammation or trauma
CC   at the site of administration.
SQ   Sequence   5 AA;

  Query Match           78.0%;  Score 32;  DB 7;  Length 5;
  Best Local Similarity  80.0%;  Pred. No. 1.07e+03;
  Matches    4;  Conservative    1;  Mismatches   0;  Indels   0;  Gaps   0;

Db      1 grgds 5
          |||:|
Qy      1 GRGES 5


RESULT   94
ID   R62948 standard; peptide; 5 AA.
AC   R62948;
DT   15-AUG-1995  (first entry)
DE   RGD contg. peptide is a constituent of a cancer metastasis inhibitor.
KW   RGD peptide; Arg-Gly-Asp; cancer metastasis inhibitor;
KW   high cell adhesion; fibronectin.
OS   Synthetic.
PN   J06306096-A.
PD   01-NOV-1994.
PF   31-JAN-1994; 009893.
PR   26-FEB-1993; JP-038677.
PA   (FUJF ) FUJI PHOTO FILM CO LTD.
DR   WPI; 95-019276/03.
PT   Peptide deriv. comprising several copies of the sequence
PT   Arg-Gly-Asp - covalently bonded to organic molecule, useful as
PT   cancer metastasis inhibitor
PS   Disclosure; Page 3; 13pp; Japanese.
CC   R62945-50 are RGD contg. peptides that form constituents of an organic
CC   mol. with a defined copy number of one of the peptides. The organic mol.
CC   contg. the RGD peptide is a cancer metastasis inhibitor. The deriv.
CC   shows substantially no toxicity and has a higher cell adhesion than the
CC   core sequence of fibronectin.
SQ   Sequence   5 AA;

  Query Match           78.0%;  Score 32;  DB 13;  Length 5;
  Best Local Similarity  80.0%;  Pred. No. 1.07e+03;
  Matches    4;  Conservative    1;  Mismatches   0;  Indels   0;  Gaps   0;

Db      1 grgds 5
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          |||:|
Qy      1 GRGES 5


RESULT   95
ID   R55076 standard; peptide; 5 AA.
AC   R55076;
DT   16-DEC-1994  (first entry)
DE   Fibronectin gelatin binding domain inhibitory peptide.
KW   fibronectin; collagen-binding proteins; inhibit cell adhesion;
KW   regulate cell matrix interactions; tumourigenesis; metastasis;
KW   wound repair; homostasis; thrombospondin.
OS   Synthetic.
PN   WO9411395-A.
PD   26-MAY-1994.
PF   09-NOV-1993; U11104.
PR   06-NOV-1992; US-973235.
PA   (LUBR ) LUBRIZOL CORP.
PA   (USSH ) US SEC DEPT HEALTH.
PI   Huang NZ,  Kolp CJ,  Sgarlata CR,  Guo N,  Krutzch HC;
PI   Negre E, Roberts DD,  Sipes JM;
DR   WPI; 94-183422/22.
PT   Peptides which bind to fibronectin and collagen-binding proteins
PT   - are used to inhibit fibronectin dependent cell adhesion to
PT   collagen matrices
PS   Disclosure; Page 36; 51pp; English.
CC   Thrombospondin is a multi-functional protein capable of interacting
CC   with numerous molecules, eg. fibronectin. Peptides have been
CC   designed that are derived from the second type I repeat of human
CC   endothelial cell thrombospondin. The peptides can be used to bind to
CC   fibronectin or other related collagen-binding proteins to inhibit
CC   fibronectin-dependent cell adhesion to collagen matrices. The peptides
CC   interact directly with the gelatin-binding domain of fibronectin
CC   and inhibits the fibronectin function.
SQ   Sequence   5 AA;

  Query Match           78.0%;  Score 32;  DB 10;  Length 5;
  Best Local Similarity  80.0%;  Pred. No. 1.07e+03;
  Matches     4;  Conservative    1;  Mismatches   0;  Indels   0;  Gaps   0;

Db      1 grgds 5
          |||:|
Qy      1 GRGES 5


RESULT   96
ID   R44045 standard; peptide; 5 AA.
AC   R44045;
DT   02-JUN-1994  (first entry)
DE   RGD peptide derivative #3.
KW   Drug; organ transplantation; rejection; immune disorder;
KW   systemic lupus.
OS   Synthetic.
FH   Key             Location/Qualifiers
FT   modified_site   1
FT                   /note= "C15H31CO-Gly"
FT   modified_site   4
FT                   /note= "Ser-OH"
PN   J05255105-A.
PD   05-OCT-1993.
PF   16-MAR-1992; 058460.
PR   16-MAR-1992; JP-058460.
PA   (FUJF ) FUJI PHOTO FILM CO LTD.
DR   WPI; 93-348360/44.
PT   Immuno-control drug for organ transplant rejection etc. - contains
PT   peptide having arginine, glycine, aspartic acid sequence
PS   Disclosure; Page 3; 11pp; Japanese.
CC   The sequences given in R44043-47 and R53144 represent examples of the
CC   claimed RGD containing peptide of the invention.  These peptides all
CC   correspond to the generic formulae:
CC   HO2-(CH2)m-C(O)-([X]-Arg-Gly-Asp-[Y])n-O-CH2CH(OR1)CH2OR2  or
CC   R3-([X]-Arg-Gly-Asp-[Y])n-Z
CC   [X], [Y] = amino acid or peptide residues;
CC   m = 1-5;
CC   n = 1-5;
CC   R1, R2 = H or 8-24C acyk or alkyl;
CC   R3 = 6-24C acyl;
CC   Z = hydroxyl or amino.
CC   These peptides form the active part of drugs which are used for the
CC   control of organ transplantation rejection or immune disorders such
CC   as systemic lupus.
SQ   Sequence   5 AA;

  Query Match           78.0%;  Score 32;  DB 8;  Length 5;
  Best Local Similarity  80.0%;  Pred. No. 1.07e+03;
  Matches     4;  Conservative    1;  Mismatches   0;  Indels   0;  Gaps   0;

Db      1 grgds 5
          |||:|
Qy      1 GRGES 5


RESULT   97
ID   R24516 standard; Protein; 5 AA.
AC   R24516;
DT   02-DEC-1992  (first entry)
DE   Platelet antagonist pepetide 3.
KW   Clinical effect; antagonist.
OS   Synthetic.
PN   J04134096-A.
PD   07-MAY-1992.
PF   21-SEP-1990; 253849.
PR   21-SEP-1990; JP-253849.
PA   (SEGK ) SEIKAGAKU KOGYO CO LTD.
DR   WPI; 92-204525/25.
PT   New peptide(s) comprising arginine-glycine-asparagine and
PT   hyaluronic acid - useful as platelet antagonists with higher
PT   activity than arginine-glycine-asparagine-valine
PS   Disclosure; Page 5; 10pp; Japanese.
CC   The sequences given in R24514-8 are peptides which are useful as
CC   platelet antagonists.  These peptides have higher activity than the
CC   conventional peptide of Arg-Gly-Asp-Val.  These peptides have a
CC   clinical effect at a lower dose, dosage is 2.5-5.0 mg/kg/day.
SQ   Sequence   5 AA;

  Query Match           78.0%;  Score 32;  DB 5;  Length 5;
  Best Local Similarity  80.0%;  Pred. No. 1.07e+03;
  Matches     4;  Conservative    1;  Mismatches   0;  Indels   0;  Gaps   0;

Db      1 grgds 5
          |||:|
Qy      1 GRGES 5


RESULT   98
ID   R48654 standard; peptide; 5 AA.
AC   R48654;
DT   21-SEP-1994  (first entry)
DE   RGD containing peptide #3 for attaching cells to a solid carrier.
KW   RGD; solid substrate; solid carrier; attachment; culture;
KW   anchorage dependant cells; receptor; cell surface; release.
OS   Synthetic.
PN   EP-587205-A.
PD   16-MAR-1994.
PF   19-JUL-1993; 202102.
PR   23-JUL-1992; EP-202261.
PA   (DUIN ) DUPHAR INT RES BV.
PI   Brands R,  Snoek MC;
DR   WPI; 94-085139/11.
PT   Solid carrier for culture of anchorage dependent cells -
PT   non-covalently coated with a polypeptide contained specific
PT   sequence for easy attachment and detachment of cells
PS   Example 1; Page 3; 7pp; English.
CC   The sequences given in R48652-54 are RGD containing peptides which
CC   are used to coat a solid substrate in the production of a solid
CC   carrier suitable for the attachment of cells.  The peptide molecules
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CC   are directly bound to the substrate by a non-covalent linkage.  The
CC   solid carrier may be used for culturing anchorage dependant cells.
CC   The epitope RGD is recognised by receptors on the cell surface for
CC   cell attachment.  The cells are subsequently released from the
CC   carrier by simply lowering the pH of the growth medium to below 7,
CC   optionally in the presence of trypsin.  The ready release of the
CC   cells from the solid carrier minimises the damage to cell surface
CC   proteins.
SQ   Sequence   5 AA;

  Query Match           78.0%;  Score 32;  DB 9;  Length 5;
  Best Local Similarity  80.0%;  Pred. No. 1.07e+03;
  Matches    4;  Conservative    1;  Mismatches   0;  Indels   0;  Gaps   0;

Db      1 grgds 5
          |||:|
Qy      1 GRGES 5


RESULT   99
ID   R37131 standard; peptide; 5 AA.
AC   R37131;
DT   19-APR-1994  (first entry)
DE   RGD peptide deriv. #2.
KW   Cell adhesion core sequence; inhibitor; cancer; metastasis; ss.
OS   Synthetic.
FH   Key             Location/Qualifiers
FT   modified_site   1
FT                   /label= Suc-Gly
PN   J05222092-A.
PD   31-AUG-1993.
PF   16-JUL-1992; 189446.
PR   18-DEC-1991; JP-335213.
PA   (FUJF ) FUJI PHOTO FILM CO LTD.
DR   WPI; 93-309192/39.
PT   Peptide derivs. used as cancer metastasis inhibitors - contain
PT   the cell adhesion core sequence Arg-Gly-Asp followed by Ser
PS   Disclosure; Page 3; 10pp; Japanese.
CC   The sequences given in R37130-48 are peptide derivatives which
CC   correspond to the generic formula; R1-X-Arg-Gly-Asp-Ser-R2; R1 = H
CC   or an optionally substituted acyl, R2 = -OR3 or -NR4R5, R3, R4, R5 =
CC   H or 1-3C alkyl, and X = a bond or an amino acid or peptide residue.
CC   These peptide derivs. contain the cell adhesion core sequence Arg-
CC   Gly-Asp.  They are useful as inhibitors of cancer metastasis.
SQ   Sequence   5 AA;

  Query Match           78.0%;  Score 32;  DB 8;  Length 5;
  Best Local Similarity  80.0%;  Pred. No. 1.07e+03;
  Matches    4;  Conservative    1;  Mismatches   0;  Indels   0;  Gaps   0;

Db      1 grgds 5
          |||:|
Qy      1 GRGES 5


RESULT  100
ID   W43306 standard; peptide; 5 AA.
AC   W43306;
DT   03-APR-1998  (first entry)
DE   Epitope found on osteopontin, useful for nitric oxide inhibition.
KW   Osteopontin; inflammation; nitric oxide; gamma-interferon; gamma-IFN;
KW   lipopolysaccharide; ischaemia; septic shock.
OS   Homo sapiens.
PN   US5695761-A.
PD   09-DEC-1997.
PF   23-DEC-1993; 173116.
PR   23-DEC-1993; US-173116.
PA   (UYNE-) UNIV NEW JERSEY MEDICINE & DENTISTRY.
PA   (RUTF ) UNIV RUTGERS STATE.
PI   Denhardt DT, Heck DE, Hwang S, Laskin DL, Laskin JD,
PI   Lopez CA;
DR   WPI; 98-041235/04.
PT   Treatment of inflammatory disorders mediated by nitric oxide - with
PT   osteopontin protein or peptide(s)
PS   Claim 1; Column 27; 22pp; English.
CC   This sequence represents an epitope found on osteopontin. The invention
CC   relates to a molecule which inhibits nitric oxide (NO) production and
CC   contains this epitope. It has a molecular weight of 2145-10000 daltons.
CC   The molecule is useful for treating an inflammatory disease or
CC   disorder associated with NO activity and/or gamma-interferon (gamma-IFN)
CC   or lipopolysaccharide, especially ischaemia, septic shock and cell-
CC   mediated immune response, located in the inner ear or kidney.
SQ   Sequence   5 AA;

  Query Match           78.0%;  Score 32;  DB 27;  Length 5;
  Best Local Similarity  80.0%;  Pred. No. 1.07e+03;
  Matches    4;  Conservative    1;  Mismatches   0;  Indels   0;  Gaps   0;

Db      1 grgds 5
          |||:|
Qy      1 GRGES 5


RESULT  101
ID   W51241 standard; peptide; 5 AA.
AC   W51241;
DT   12-AUG-1998  (first entry)
DE   Peptide which inhibits angiogenesis in vitro.
KW   Integrin alpha v beta 3 receptor; osteoporosis; restenosis; cancer;
KW   arthritis; diabetic; retinopathy; disulphide; inhibitor.
OS   Synthetic.
PN   US5767071-A.
PD   16-JUN-1998.
PF   07-JUN-1995; 482106.
PR   07-JUN-1995; US-482106.
PA   (IXSY-) IXSYS INC.
PI   Huse WD, Lee BA, Palladino MA, Varner JA;
DR   WPI; 98-361749/31.
PT   New Non-RGD cyclic peptides that bind to integrin receptor - useful
PT   for treating e.g. osteoporosis, restenosis, cancer, arthritis and
PT   diabetic retinopathy
PS   Disclosure; Column 1; 23pp; English.
CC   The invention relates to cyclic, non Arg-Gly-Asp (non-RGD) peptides that
CC   bind to the alpha v beta 3 integrin receptor and have the sequence Arg
CC   Cys X1 Gly Asp Ser X2 Cys X3, where the cysteines are connected by a di-
CC   sulphide bond, X1 is Gly, Ser or Ala, and X2 and X3 are any amino acids.
CC   The peptides are useful for treating diseases involving alpha v beta 3
CC   receptors e.g. osteoporosis, restenosis, cancer, arthritis and diabetic
CC   retinopathy. The present sequence represents an Arg-Gly-Asp containing
CC   peptide which inhibits angiogenisis in vitro.
SQ   Sequence   5 AA;

  Query Match           78.0%;  Score 32;  DB 31;  Length 5;
  Best Local Similarity  80.0%;  Pred. No. 1.07e+03;
  Matches    4;  Conservative    1;  Mismatches   0;  Indels   0;  Gaps   0;

Db      1 grgds 5
          |||:|
Qy      1 GRGES 5


RESULT  102
ID   R29051 standard; peptide; 5 AA.
AC   R29051;
DT   17-FEB-1993  (first entry)
DE   Peptide lipid contg. RGD.
KW   Synthetic; cell migration; inhibitor; cell adhesion membrane; cell
KW   culture body.
OS   Synthetic.
FH   Key             Location/Qualifiers
FT   modified_site   1
FT                   /note= "acylated"
FT   modified_site   5
FT                   /note= "alkylated"
PN   J04221394-A.
PD   11-AUG-1992.
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PF   29-NOV-1990; 333335.
PR   26-OCT-1990; JP-289493.
PA   (FUJF ) FUJI PHOTO FILM CO LTD.
DR   WPI; 92-313678/38.
PT   New synthetic peptide lipid(s) and salts - useful as cell
PT   migration inhibitors, cell adhesion membranes or cell culture
PT   bodies
PS   Disclosure; Page 3; 9pp; Japanese.
CC   The peptide sequence is an example of a highly generic sequence contg.
CC   the RGD motif.  Compounds contg. these lipid peptides are useful as
CC   cell migration inhibitors in cell adhesion membranes or cell culture
CC   bodies.   See also R29048-54.
SQ   Sequence   5 AA;

  Query Match           78.0%;  Score 32;  DB 5;  Length 5;
  Best Local Similarity  80.0%;  Pred. No. 1.07e+03;
  Matches    4;  Conservative    1;  Mismatches   0;  Indels   0;  Gaps   0;

Db      1 grgds 5
          |||:|
Qy      1 GRGES 5


RESULT  103
ID   W65001 standard; peptide; 5 AA.
AC   W65001;
DT   10-SEP-1998  (first entry)
DE   Synthetic angiogenesis inhibiting peptide.
KW   Angiogenesis; inhibitor; alpha-v beta-3 integrin receptor; treatment;
KW   disease; diagnosis; immunoassay; detection; cancer; inflammation;
KW   rheumatoid arthritis; osteoporosis; restenosis; retinopathy; glaucoma;
KW   retinal neovascularisation; diabetic retinopathy; macular degeneration.
OS   Synthetic.
PN   US5780426-A.
PD   14-JUL-1998.
PF   07-JUN-1995; 482107.
PR   07-JUN-1995; US-482107.
PA   (IXSY-) IXSYS INC.
PI   Huse WD, Lee BA, Palladino MA, Varner JA;
DR   WPI; 98-413114/35.
PT   New non-RGD peptides with specific affinity for the alphav, beta3
PT   integrin receptor - contain specific pentapeptide sequence, used for
PT   treatment or prevention of particularly angiogenic disorders such as
PT   cancer, inflammation, osteoprosis etc.
PS   Disclosure; Column 1; 20pp; English.
CC   W65001-W65010 are synthetic peptides used in an assay to determine which
CC   peptides bind to and inhibit the alpha-v beta-3 integrin receptor. Such
CC   inhibitors could be used to treat or prevent diseases mediated by the
CC   alpha-v beta-3 integrin receptor, particularly angiogenic diseases, e.g.
CC   cancer and their metastases, inflammation, rheumatoid arthritis,
CC   osteoporosis, restenosis, retinal neovascularisation (glaucoma), diabetic
CC   retinopathy and macular degeneration. The peptides are also useful for
CC   diagnosis of such diseases by detecting or quantifying the receptor in
CC   samples and can be used to raise antibodies useful as immunoassay
CC   reagents.
SQ   Sequence   5 AA;

  Query Match           78.0%;  Score 32;  DB 33;  Length 5;
  Best Local Similarity  80.0%;  Pred. No. 1.07e+03;
  Matches    4;  Conservative    1;  Mismatches   0;  Indels   0;  Gaps   0;

Db      1 grgds 5
          |||:|
Qy      1 GRGES 5


RESULT  104
ID   R35463 standard; peptide; 5 AA.
AC   R35463;
DT   26-AUG-1993  (first entry)
DE   Propene-amide deriv. polymer metastasis inhibitor.
KW   Low toxicity; higher cell adhesion ability; metastasis inhibition.
OS   Synthetic.
FH   Key             Location/Qualifiers
FT   modified_site   1
FT                   /note= "CH2=CCH3CONHCH2-CH2-CO-Gly,
FT                   CH2=CC2H5CONH-(CH2)4-CO-Gly or
FT                   CH2=CCH3CONHCH2-CH2-O-CH2-CO-Gly"
PN   J05097699-A.
PD   20-APR-1993.
PF   04-OCT-1991; 258095.
PR   04-OCT-1991; JP-258095.
PA   (FUJF ) FUJI PHOTO FILM CO LTD.
DR   WPI; 93-164370/20.
PT   Low toxicity metastasis inhibitor - composed of propene-amide
PT   deriv. polymer or its pharmacologically acceptable salts
PS   Claim 1; Page 2; 12pp; Japanese.
CC   The sequence is that of a polymer of propene amide deriv. which has
CC   a higher cell adhesion ability, compared with that of the core
CC   sequence of cell adhesive protein. It has various kinds of
CC   biological activities e.g. metastasis inhibition and has low
CC   toxicity.
SQ   Sequence   5 AA;

  Query Match           78.0%;  Score 32;  DB 7;  Length 5;
  Best Local Similarity  80.0%;  Pred. No. 1.07e+03;
  Matches    4;  Conservative    1;  Mismatches   0;  Indels   0;  Gaps   0;

Db      1 grgds 5
          |||:|
Qy      1 GRGES 5


RESULT  105
ID   R70477 standard; peptide; 5 AA.
AC   R70477;
DT   20-DEC-1995  (first entry)
DE   Cancer metastasis inhibitory RGD peptide derivative #5.
KW   Cancer metastasis; adhesive peptide; core sequence; dextran; cancer;
KW   water soluble polysaccharide; metastasis; wound; immunogenicity.
OS   Synthetic.
PN   J07089999-A.
PD   04-APR-1995.
PF   17-SEP-1993; 254779.
PR   17-SEP-1993; JP-254779.
PA   (JAPG ) NIPPON ZEON KK.
DR   WPI; 95-167254/22.
PT   Cancer metastasis inhibitive peptide derivs. - useful for inhibition
PT   of cancer metastasis, healing of wounds and regulation of
PT   immunogenicity.
PS   Disclosure; Page 2; 6pp; Japanese.
CC   The peptides R70472-90 and R82907-24 are peptide derivatives which
CC   inhibit cancer metastasis.  They are composed of an adhesive peptide with
CC   a core sequence selected from: RGD (R70472-85), YIGSR (R70486-90) or
CC   other sequence (R82907-24), linked to a water soluble polysaccharide,
CC   preferably a water soluble dextran, at the C-terminus.  The peptides are
CC   useful in inhibiting cancer metastasis, healing wounds and the regulation
CC   of immunogenicity.
SQ   Sequence   5 AA;

  Query Match           78.0%;  Score 32;  DB 14;  Length 5;
  Best Local Similarity  80.0%;  Pred. No. 1.07e+03;
  Matches    4;  Conservative    1;  Mismatches   0;  Indels   0;  Gaps   0;

Db      1 grgds 5
          |||:|
Qy      1 GRGES 5


RESULT  106
ID   W25177 standard; peptide; 5 AA.
AC   W25177;
DT   05-JAN-1998  (first entry)
DE   RGD-peptide capable of binding cell adhesion molecules.
KW   RGD; arginine; glycine; aspartic acid; cell adhesion molecule;
KW   binding; bladder irrigation; tumour removal; endoscopic operation;
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KW   transurethral resection; cancer; neoplasia.
OS   Synthetic.
PN   DE19529909-A1.
PD   20-FEB-1997.
PF   15-AUG-1995; 029909.
PR   15-AUG-1995; DE-029909.
PA   (FREP ) FRESENIUS AG.
PI   Boehle A;
DR   WPI; 97-133793/13.
PT   Endoscopic irrigation solns. - contg. peptide(s) that bind to cell
PT   adhesion molecules
PS   Claim 5; Page 8; 8pp; German.
CC   W25173-W25186 are peptides containing an RGD sequence or equivalent.
CC   The peptides are capable of binding to cell adhesion molecules and
CC   are used in aqueous irrigation solutions for use during and after
CC   endoscopic operations. Preferred irrigation solutions are
CC   electrolyte-free and contain 1 microg/ml to 100 mg/ml of one or more
CC   oligopeptides containing the amino acid sequences: RGD, LDV, IDA, DGEA,
CC   GPRP, VTL, YIGSR, KQAGDV and/or REDV (given in one letter amino acid
CC   code). The solutions are especially used for irrigating the bladder
CC   during and after tumour removal by transurethral resection. The
CC   peptides protect against recurrence of tumours.
SQ   Sequence   5 AA;

  Query Match           78.0%;  Score 32;  DB 24;  Length 5;
  Best Local Similarity  80.0%;  Pred. No. 1.07e+03;
  Matches    4;  Conservative    1;  Mismatches   0;  Indels   0;  Gaps   0;

Db      1 grgds 5
          |||:|
Qy      1 GRGES 5


RESULT  107
ID   R07442 standard; peptide; 5 AA.
AC   R07442;
DT   03-FEB-1991  (first entry)
DE   Peptide with anti-metastasis activity.
KW   Metastasis; cancer.
OS   Synthetic.
FH   Key             Location/Qualifiers
FT   misc_difference 2
FT                   /label=Side chain
FT                   /note="t-butyloxycarbonyl or sialic acid deriv. or H"
FT   misc_difference 4..0
FT                   /label=Side chain
FT                   /note="Benzyloxycarbonyl or H"
PN   J02233696-A.
PD   17-SEP-1990.
PF   06-MAR-1989; 053496.
PR   06-MAR-1989; JP-053496.
PA   (MECT-) MECT KK.
DR   WPI; 90-325187/43.
PT   Penta peptide derivs. - and their prepn. for prevention of cancer
PT   metastasis.
PS   Claim 1; Page 1; 8pp; Japanese.
CC   Peptide is useful in prevention of cancer metastasis and has a high
CC   bioavailability.
SQ   Sequence   5 AA;

  Query Match           78.0%;  Score 32;  DB 1;  Length 5;
  Best Local Similarity  80.0%;  Pred. No. 1.07e+03;
  Matches    4;  Conservative    1;  Mismatches   0;  Indels   0;  Gaps   0;

Db      1 grgds 5
          |||:|
Qy      1 GRGES 5


RESULT  108
ID   R27030 standard; peptide; 5 AA.
AC   R27030;
DT   17-FEB-1993  (first entry)
DE   Peptide lipid contg. RGD.
KW   Synthetic; cell migration; inhibitor; cell adhesion membrane; cell
KW   culture body.
OS   Synthetic.
FH   Key             Location/Qualifiers
FT   modified_site   1
FT                   /note= "acylated"
FT   modified_site   5
FT                   /note= "alkylated"
PN   J04221395-A.
PD   11-AUG-1992.
PF   29-NOV-1990; 333336.
PR   26-OCT-1990; JP-289494.
PA   (FUJF ) FUJI PHOTO FILM CO LTD.
DR   WPI; 92-313679/38.
PT   New synthetic peptide lipid(s) and salts - useful as cell
PT   migration inhibitors, cell adhesion membranes or cell culture
PT   bodies
PS   Disclosure; Page 3; 9pp; Japanese.
CC   The peptide sequence is an example of a highly generic sequence contg.
CC   the RGD motif.  Compounds contg. these lipid peptides are useful as
CC   cell migration inhibitors in cell adhesion membranes or cell culture
CC   bodies.   See also R27027-33.
SQ   Sequence   5 AA;

  Query Match           78.0%;  Score 32;  DB 5;  Length 5;
  Best Local Similarity  80.0%;  Pred. No. 1.07e+03;
  Matches    4;  Conservative    1;  Mismatches   0;  Indels   0;  Gaps   0;

Db      1 grgds 5
          |||:|
Qy      1 GRGES 5


RESULT  109
ID   R04610 standard; protein; 5 AA.
AC   R04610;
DT   05-SEP-1990  (first entry)
DE   Antiviral agent.
KW   Antiviral; M2; poliovirus; polio; heatitis.
OS   Synthetic.
PN   J02078631-A.
PD   19-MAR-1990.
PF   14-SEP-1988; 228843.
PR   14-SEP-1988; JP-228843.
PA   (NIHA) Nippon Mining KK.
DR   WPI; 90-129060/17.
PT   Antiviral agent contg. tri:peptide (unit) -
PT   of basic aminoacid, then alanine, glycine or sarcosine, and
PT   acidic aminoacid, effective against virus with protein-terminated DNA
PT   or RNA.
PS   Disclosure; 4pp; Japanese.
CC   Peptide is effective against inhibiting propogation of DNA or RNA
CC   bonded, protein containing viruses eg. Poliovirus, Hepatitis virus.
SQ   Sequence   5 AA;

  Query Match           78.0%;  Score 32;  DB 1;  Length 5;
  Best Local Similarity  80.0%;  Pred. No. 1.07e+03;
  Matches    4;  Conservative    1;  Mismatches   0;  Indels   0;  Gaps   0;

Db      1 grgds 5
          |||:|
Qy      1 GRGES 5


RESULT  110
ID   R48653 standard; peptide; 6 AA.
AC   R48653;
DT   21-SEP-1994  (first entry)
DE   RGD containing peptide #2 for attaching cells to a solid carrier.
KW   RGD; solid substrate; solid carrier; attachment; culture;
KW   anchorage dependant cells; receptor; cell surface; release.
OS   Synthetic.
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PN EP-587205-A.
PD 16-MAR-1994.
PF 19-JUL-1993; 202102.
PR 23-JUL-1992; EP-202261.
PA (DUIN) DUPHAR INT RES BV.
PI Brands R, Snoek MC;
DR WPI; 94-085139/11.
PT Solid carrier for culture of anchorage dependent cells -
PT non-covalently coated with a polypeptide contained specific
PT sequence for easy attachment and detachment of cells
PS Example 1; Page 3; 7pp; English.
CC The sequences given in R48652-54 are RGD containing peptides which
CC are used to coat a solid substrate in the production of a solid
CC carrier suitable for the attachment of cells. The peptide molecules
CC are directly bound to the substrate by a non-covalent linkage. The
CC solid carrier may be used for culturing anchorage dependant cells.
CC The epitope RGD is recognised by receptors on the cell surface for
CC cell attachment. The cells are subsequently released from the
CC carrier by simply lowering the pH of the growth medium to below 7,
CC optionally in the presence of trypsin. The ready release of the
CC cells from the solid carrier minimises the damage to cell surface
CC proteins.
SQ Sequence 6 AA;

Query Match 78.0%; Score 32; DB 9; Length 6;
Best Local Similarity 80.0%; Pred. No. 1.07e+03;
Matches 4; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

Db 2 grgds 6
|||:|
Qy 1 GRGES 5

RESULT 111
ID R92858 standard; peptide; 6 AA.
AC R92858;
DT 03-OCT-1996 (first entry)
DE Fibronectin fragment IVA1b as positive control for cell adhesion.
KW Intercellular adhesion; stimulation; inhibition; skin graft;
KW synthetic blood vessel; coating; endothelial cell; epidermal cell;
KW chemotactic attractor; wound healing; organ transplantation;
KW thrombosis; arteriosclerosis; cancer metastases.
OS Synthetic.
FH Key Location/Qualifiers
FT modified_site 6
FT /note= "C-terminal Cys residue for attaching
FT peptide to a carrier protein, e.g. BSA"
PN DE4430601-A1.
PD 29-FEB-1996.
PF 22-AUG-1994; 430601.
PR 22-AUG-1994; DE-430601.
PA (BEIE) BEIERSDORF AG.
PI Doerschner A, Eichner W, Kock K, Mielke H;
DR WPI; 96-130242/14.
PT Peptide(s) that stimulate or inhibit cell to cell adhesion - used
PT e.g. to coat synthetic blood vessels with endothelial cells, to
PT prepare, or increase growth of skin grafts, to prevent thrombosis
PT etc.
PS Example 1; Page 7; 18pp; German.
CC Peptides contg. the highly generic sequence AA5-AA4-AA3-AA2-AA1-(AAX)n
CC where AA5 is Glu, Ser, Asp or Asn; AA4 is Leu or Ser, AA3 is Leu, Ile,
CC Phe or Gly; AA2 is Asp, Leu, Asn or Ser; AA1 is Gly, Pro or Asp; AAX
CC is any amino acid and n = 0 or 1 are claimed; AA5 or AA5-AA4 may be
CC absent. When two or more such peptides are attached to a carrier, the
CC product can be used for stimulating adhesion of eukaryotic cells in
CC vitro. Particular applications include coating synthetic blood vessels
CC with endothelial cells, preparing skin grafts using epithelial cells
CC or stimulating wound healing. When a single peptide is used it may
CC inhibit intercellular adhesion, making it useful for preventing
CC thrombosis or arteriosclerosis or to suppress cancer metastases. The
CC peptides can also be used as chemotactic attractors and for detecting/
CC quantifying cell-cell adhesion in vitro.
CC The present sequence is a fragment of fibronectin which includes
CC the Arg-Gly-Asp motif and which was used as a positive control in a
CC cell adhesion assay on the novel peptides.
SQ Sequence 6 AA;

Query Match 78.0%; Score 32; DB 18; Length 6;
Best Local Similarity 80.0%; Pred. No. 1.07e+03;
Matches 4; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

Db 1 grgds 5
|||:|
Qy 1 GRGES 5

RESULT 112
ID W79653 standard; peptide; 6 AA.
AC W79653;
DT 08-DEC-1998 (first entry)
DE Cyclo(1-alpha, 6-gamma)-Gly-Arg-Gly-Asp-Ser-Glu-NH2.
KW Platelet aggregation inhibitor; antithrombotic; antimetastatic; cyclic.
OS Synthetic.
FH Key Location/Qualifiers
FT Modified_site 1..6
FT /note= "the amino group of Gly(1) is condensed with
FT the gamma-carboxy of Glu(6) to give a cyclic molecule"
FT Modified_site 2
FT /note= "Arg or MeArg"
PN US5643872-A.
PD 01-JUL-1997.
PF 26-AUG-1994; 296621.
PR 19-DEC-1990; US-630124.
PR 23-OCT-1989; US-425906.
PR 28-SEP-1990; US-590635.
PR 26-AUG-1994; US-296621.
PA (SMIK) SMITHKLINE BEECHAM CORP.
PI Ali FE, Samanen JM;
DR WPI; 97-350267/32.
PT New peptide derivatives - are useful in inhibiting platelet
PT aggregation and clot formation, and for inhibiting reocclusion of
PT blood vessels following fibrinolytic therapy.
PS Disclosure; Column 7; 28pp; English.
CC The patent describes new cyclic peptides which have a core of formula
CC -B-Gly-Asp-, where B = a D- or L-amino acid chosen from Arg, HArg
CC (i.e. homoarginine), (Me2)Arg, (Et2)Arg and Lys (or an alpha-substituted
CC derivative of these). Cyclisation is effected through specific types of
CC covalent linkages. The cyclic peptides are platelet aggregation and clot
CC formation inhibitors. They may be used in treatment of acute myocardial
CC infarction, deep vein thrombosis, pulmonary embolism, dissecting
CC aneurysm, transient ischaemic attack, stroke, unstable angina,
CC disseminated intravascular coagulation, septicaemia, surgical or
CC infectious shock, post-operative and post-partum trauma, cardiopulmonary
CC bypass surgery, incompatible blood transfusion, abruptio placenta,
CC thrombotic thrombocytopaenic purpura, snake venom and immune diseases.
CC They may also be used for inhibiting reocclusion of blood vessels
CC following fibrinolytic therapy. They may also be used in prevention of
CC metastatic conditions.
CC The present sequence is a specific example of the new peptides.
SQ Sequence 6 AA;

Query Match 78.0%; Score 32; DB 35; Length 6;
Best Local Similarity 80.0%; Pred. No. 1.07e+03;
Matches 4; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

Db 1 grgds 5
|||:|
Qy 1 GRGES 5

RESULT 113
ID W68569 standard; peptide; 6 AA.
AC W68569;
DT 25-JAN-1999 (first entry)
DE Conformationally constrained RGD peptide #6.
KW Cell adhesion motif; RGD motif; affinity; receptor; stereochemistry;

KW conformation; cyclisation; medical devise; prosthesis; implant;
KW cell attachment.
OS Synthetic.
PN US5827821-A.
PD 27-OCT-1998.
PF 16-JUL-1992; 914643.
PR 29-DEC-1988; US-292517.
PR 10-DEC-1987; US-131390.
PR 15-OCT-1991; US-776839.
PR 16-JUL-1992; US-914643.
PA (BURN-) BURNHAM INST.
PI Pierschbacher MD, Ruoslahti EI;
DR WPI; 98-594031/50.
PT New synthetic peptides - used for in vivo applications such as
PT coating of medical devices, including prosthesis and implants, to
PT aid the attachment of cells
PS Disclosure; Column 5; 11pp; English.
CC This is an example of a novel type of peptide containing the cell
CC adhesion motif Arg-Gly-Asp (RGD) of formula: X-R1-R2-Arg-Gly-Asp-R3-R4-Y,
CC where R2 = 0-5 amino acids; R3 = 0-5 amino acids; R1, R4 = amino acids
CC connected by a bridge; X = H or one or more amino acids; and Y = OH, NH2
CC or one or more amino acids. Preferably the novel peptides have 5-30 amino
CC acid residues. The peptides have high affinity and specificity for their
CC receptors by virtue of restrictions on their stereochemical conformation,
CC restrictions which are provided by cyclisation. The peptides have various
CC applications relating to their cell-adhesion properties e.g. as coatings
CC of medical devices, including prosthesis and implants, to aid the
CC attachment of cells. The peptides also have in vitro uses in coating of
CC substrates, such as cell culture substrates, to promote cell adhesion.
SQ Sequence 6 AA;

Query Match 78.0%; Score 32; DB 37; Length 6;
Best Local Similarity 80.0%; Pred. No. 1.07e+03;
Matches 4; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

Db 1 grgds 5
|||:|
Qy 1 GRGES 5

RESULT 114
ID R39600 standard; peptide; 6 AA.
AC R39600;
DT 08-DEC-1993 (first entry)
DE Arg-Gly-Asp-contg. peptide.
KW LRI; beta-integrin; cytoadhesin; ligand-binding specificity;
KW polymorphonuclear neutrophil; integrin associated protein; IAP;
KW platelet glycoprotein gpIIb/IIIa; fibrinogen.
PN US5225531-A.
PD 06-JUL-1993.
PF 09-APR-1992; 866678.
PR 09-APR-1992; US-866678.
PA (UNIW) UNIV WASHINGTON.
PI Adams SP, Brown EJ, Gresham HD;
DR WPI; 93-226662/28.
PT Peptide of lysine glycine alanine glycine aspartic acid valine
PT amino acid chain - comprises ligand for leukocyte response
PT integrin, inhibiting fibrinogen-dependent activation of
PT polymorphonuclear neutrophil
PS Disclosure; Column 2; 19pp; English.
CC A 15 amino acid peptide in the C-terminal region of the fibrinogen
CC gamma chain (384-411) which contains the sequence R39598 and
CC peptide GRGDSC (R39600) were investigated for their effect on
CC fibrinogen-stimulated ingestion of EIgG by polymorphonuclear
CC neutrophils (EIgG are sheep erythrocytes opsonised with IgG). Both
CC GRGDSC and the 15 amino acid fibrinogen gamma peptide were capable
CC of abrogating fibrinogen-stimulated ingestion; neither had an
CC effect on the level of ingestion by unstimulated PMN.
SQ Sequence 6 AA;

Query Match 78.0%; Score 32; DB 8; Length 6;
Best Local Similarity 80.0%; Pred. No. 1.07e+03;
Matches 4; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

Db 1 grgds 5
|||:|
Qy 1 GRGES 5

RESULT 115
ID R70482 standard; peptide; 6 AA.
AC R70482;
DT 20-DEC-1995 (first entry)
DE Cancer metastasis inhibitory RGD peptide derivative #10.
KW Cancer metastasis; adhesive peptide; core sequence; dextran; cancer;
KW water soluble polysaccharide; metastasis; wound; immunogenicity.
OS Synthetic.
PN J07089999-A.
PD 04-APR-1995.
PF 17-SEP-1993; 254779.
PR 17-SEP-1993; JP-254779.
PA (JAPG) NIPPON ZEON KK.
DR WPI; 95-167254/22.
PT Cancer metastasis inhibitive peptide derivs. - useful for inhibition
PT of cancer metastasis, healing of wounds and regulation of
PT immunogenicity.
PS Disclosure; Page 2; 6pp; Japanese.
CC The peptides R70472-90 and R82907-24 are peptide derivatives which
CC inhibit cancer metastasis. They are composed of an adhesive peptide with
CC a core sequence selected from: RGD (R70472-85), YIGSR (R70486-90) or
CC other sequence (R82907-24), linked to a water soluble polysaccharide,
CC preferably a water soluble dextran, at the C-terminus. The peptides are
CC useful in inhibiting cancer metastasis, healing wounds and the regulation
CC of immunogenicity.
SQ Sequence 6 AA;

Query Match 78.0%; Score 32; DB 14; Length 6;
Best Local Similarity 80.0%; Pred. No. 1.07e+03;
Matches 4; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

Db 2 grgds 6
|||:|
Qy 1 GRGES 5

RESULT 116
ID W56676 standard; peptide; 6 AA.
AC W56676;
DT 14-AUG-1998 (first entry)
DE Peptide derived from the heparin binding site of plasma fibrinonectin.
KW Cell adhesion activity; heparin binding site; human;
KW plasma fibrinonectin; inhibition; cancer metastasis.
OS Synthetic.
OS Homo sapiens.
PN EP-837074-A2.
PD 22-APR-1998.
PF 18-SEP-1997; 116293.
PR 19-SEP-1996; JP-248247.
PA (HISM) HISAMITSU PHARM CO LTD.
PI Fukai F, Katayama T;
DR WPI; 98-219072/20.
PT Peptide(s) that inhibit cell adhesion - comprising fragments of
PT heparin-binding site of fibronectin
PS Example 1; Page 12; 21pp; English.
CC Synthetic peptides W37820-24 and W56673-80 have cell adhesion inhibition
CC activity. All the peptides were modified with maleimide-activated
CC Keyhole Limpet Haemocyanine in order to improve their solubility.
CC The peptides are derived from a part of the heparin binding site of
CC human plasma fibrinonectin. Peptide W56680 has the strongest cell
CC adhesion inhibition activity. The peptides are used for inhibiting
CC cancer metastasis.
SQ Sequence 6 AA;

Query Match 78.0%; Score 32; DB 31; Length 6;
Best Local Similarity 66.7%; Pred. No. 1.07e+03;
Matches 4; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

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Db      1 gredsp 6
          || :||
Qy      1 GRGESP 6


RESULT  117
ID   W66829 standard; peptide; 6 AA.
AC   W66829;
DT   10-DEC-1998  (first entry)
DE   Peptide useful for altering bone resorption.
KW   bone resorption; pharmacore; angiogenesis; restenosis; integrin receptor;
KW   alpha v beta 3 integrin receptor; osteoclast; cyclic.
OS   Synthetic.
FH   Key             Location/Qualifiers
FT   Modified_site   6
FT                   /note= "C-terminal amide"
PN   US5807819-A.
PD   15-SEP-1998.
PF   12-APR-1995; 421698.
PR   12-APR-1995; US-421698.
PR   15-APR-1994; US-227316.
PR   08-SEP-1994; US-303052.
PA   (LJOL-) LA JOLLA CANCER RES CENT.
PI   Cheng S, Ingram R, Mullen D, Tschopp JF;
DR   WPI; 98-555601/47.
PT   Use of peptide derivatives which can alter integrin receptor binding
PT   - for altering bone resorption, treating angiogenesis or restenosis
PT   and altering integrin receptor mediated interactions
PS   Example 2; Figure 2B; 87pp; English.
CC   A new method is claimed for altering bone resorption. It comprises
CC   administration of a peptide of formula: X1X2X3X4GDX5X6X7X8; where X1 =
CC   R1R2N or 0-10 amino acids (optionally protected by acetylation at the N-
CC   terminus); X2 = absent or 1 amino acid; X3 = absent or 1 or 2 amino
CC   acids; X4 = N-Me-Arg; X5 = residue which provides an ionic interaction
CC   with an integrin receptor, or is Msa, Psa or Tfsa;  X6 = residue which
CC   has an aliphatic side chain; a non-natural amino acid that is
CC   hydrophobic; or Thr; X7 = a residue capable of forming a bond (i) with a
CC   bridging amino acid of X2, (ii) with X3 when X2 is absent, or (iii) with
CC   X4 when X2 and X3 are absent, to conformationally restrain the peptide;
CC   X8 = NR3R4; OR5; or 0-10 amino acids, optionally protected as an amide at
CC   the C- terminus; R1, R3-R5 = H or alkyl; R2 = H, alkyl, alkyl-CO or
CC   phenyl-CO. The peptides are useful for inhibiting bone resorption,
CC   angiogenesis or restenosis, and for altering integrin receptor-mediated
CC   interactions, especially alpha v beta 3 integrin receptor-mediated
CC   binding of cells to a matrix. They may be used for reducing or inhibiting
CC   osteoclast binding to a matrix. The present sequence represents an
CC   example of a circular peptide disclosed in the specification.
SQ   Sequence   6 AA;

  Query Match           75.6%;  Score 31;  DB 36;  Length 6;
  Best Local Similarity  60.0%;  Pred. No. 1.42e+03;
  Matches     3;  Conservative    2;  Mismatches   0;  Indels   0;  Gaps   0;

Db      1 rgdtp 5
          ||::|
Qy      2 RGESP 6


RESULT  118
ID   R96377 standard; peptide; 6 AA.
AC   R96377;
DT   05-JUL-1996  (first entry)
DE   RGD cyclic peptide, TL#366, binds alpha-v,beta3 integrin receptor.
KW   RGD-containing peptide; alpha-v, beta-3 integrin receptor; osteoclast;
KW   matrix; bone; inhibition; bone resorption; promote; endothelial cell;
KW   smooth muscle cell; restenosis; angiogenesis; cyclic.
OS   Synthetic.
FH   Key             Location/Qualifiers
FT   modified_site   1
FT                   /note= "forms lactam bridge with Glu(6)"
FT   modified_site   6
FT                   /note= "forms lactam bridge with Arg(1), amidated
FT                   C-terminal"
PN   WO9528426-A2.
PD   26-OCT-1995.
PF   12-APR-1995; U04741.
PR   13-APR-1994; US-227316.
PR   08-SEP-1994; US-303052.
PA   (LJOL-) LA JOLLA CANCER RES FOUND.
PI   Cheng S,  Ingram R,  Mullen D,  Tschopp J;
DR   WPI; 95-373767/48.
PT   Altering alpha-v, beta-3 integrin receptor-mediated binding of cell
PT   to matrix - using conformationally restrained peptide of RGD type,
PT   e.g. for treating inappropriate angiogenesis or for inhibiting bone
PT   resorption
PS   Claim 85; Page 79; 99pp; English.
CC   The sequences given in R96301-417 are non-naturally occurring RGD-
CC   containing peptides which alter the alpha-v, beta-3 integrin receptor
CC   binding of a cell to a matrix, such as the binding of an osteoclast to
CC   a matrix such as bone.  These peptides inhibit bone resorption and can
CC   inhibit or promote alpha-v, beta-3-mediated cell attachment depending
CC   on whether they are present in the cell in a soluble form or are bound
CC   to a solid substrate.  These peptides can be used in the amelioration
CC   of the severity of a pathology involving alpha-v, beta-3 receptor-
CC   mediated binding of a cell, such as an osteoclast, endothelial cell or
CC   smooth muscle cell to a matrix.  They are used for treating conditions
CC   associated with restenosis or inappropriate or insufficient angiogenesis,
CC   or for inhibiting osteoclast binding to the matrix.
SQ   Sequence   6 AA;

  Query Match           75.6%;  Score 31;  DB 16;  Length 6;
  Best Local Similarity  60.0%;  Pred. No. 1.42e+03;
  Matches     3;  Conservative    2;  Mismatches   0;  Indels   0;  Gaps   0;

Db      1 rgdtp 5
          ||::|
Qy      2 RGESP 6


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